Arkansas Racial and Ethnic Health Disparity Study Report

Creshelle R. Nash, MD, MPH
Eduardo R. Ochoa, Jr., MD
Spring 2004

Your Tobacco Settlement Dollars at Work

"Of all forms of inequality, injustice in healthcare is the most shocking and the most inhumane."

Rev. Dr. Martin Luther King, Jr.

National Convention of the Medical Committee for Human Rights
Chicago, March 25, 1966

ACKNOWLEDGEMENTS

This study was funded by the Arkansas Minority Health Commission (AMHC) under the direction of Judy Smith. It is in response to the Interim Study Proposal 2001-76 of the 82nd General Assembly, proposed by the former Chair of The House Interim Committee on Public Health, Welfare and Labor, current state Senator Tracy Steele. The work of this study would not have been possible without the support of several institutions and individuals across Arkansas. We would particularly like to thank the AMHC staff and commissioners, the UAMS College of Public Health, the Arkansas Center for Health Improvement (ACHI) and the Arkansas Department of Health (ADH). Most importantly, we are indebted to our focus group recruiters, volunteers, and participants who shared their time and personal experiences with us in the hopes of improving the health of all Arkansans. Their strength and perseverance carried us through the completion of this study and provide energy for the work that is yet to come.

AMHC Staff: Tracy Gatlin is the Project Director for this study and coordinated the recruitment, location, and logistics for 15 focus groups. Dr. Camille Jones provided valuable advice and review of the manuscript. Lo Vongsaravane, Olesegun Salami, Cyndi Elizondo, Kym Calloway, and Rachael Sanders provided particular support for the focus group recruitment and logistics.

UAMS College of Public Health: Founding Dean of the College, Dr. Jim Raczynski, provided advice for the study, focus group question guide, and manuscript and has given much appreciated professional support for this work. The focus group portion of the study and subsequent analysis could not have been done without the support, advice, and input of Willa Sanders, Dana Perry, Holly Felix, and Dr. Kate Stewart. Carla Sparks, Rosa Maria Pippin (La Casa Health Network), and Rhonda Sanders (Arkansas Advocates for Children and Families) were valuable volunteer focus group moderators. Dr. Tom Bruce, the College's first dean, deserves our sincere thanks for his vision, advice, and personal and professional support.

ADH: The minority health profile presented in this report could not have been done without data obtained by and analyzed with the help of several individuals including Doug Murray, John Senner, Ed Carson, Eileen Kelly, and Sue Ellen Peglow.

ACHI: Shirley Tyson provided training, insight, advice, and personal support on the preparation of much of the data in this study. Dr. Joe Thompson, Suzanne McCarthy, and Amy Rossi were constant sources of support and advice throughout the life of this project.

Grants and Scientific Publications: Sheila Scribner was invaluable in the production of this report. Her patience and dedication were endless.

For their love, patience and understanding during my time away from them to work on this study, I am grateful to Kelly, Rosemarie, and Amelia. I am also appreciative of the patients and families I serve and my colleagues, for their support of my endeavors to improve health. Lastly, my El Paso family is responsible for where I am today. ***Eddie Ochoa, MD, FAAP***

This has been an incredible experience for me in my growth as a healthcare provider, researcher, community member, and human being. It has fueled my passion and helped me to understand my purpose. I would like to thank my friends and family for their love and support throughout the time away, travel, and late nights. ***Creshelle R. Nash, MD, MPH***

Table of Contents

EXECUTIVE SUMMARY

Health is defined as the mental and physical well being that allows one to develop to the fullest potential. Health is a precious resource that also allows for the development of meaningful relationships in families and a full, productive life in our communities. Over the last 100 years the nation's health has greatly improved. However, all Americans have not realized these improvements. There are significant and often dramatic differences in health status by both region and by race and Hispanic origin.

Given the changes in the makeup of the US and state populations, it is imperative that differences in health status and healthcare by race and Hispanic origin be fully examined and improved. Health and healthcare disparities are not only unjust and unacceptable, but also a main focus of national health policy. These inequalities have human, economic, social and developmental costs that impact all residents of the nation now and will continue to do so in the future.

The purpose of the Arkansas Racial and Ethnic Health Disparity Study is to describe the differences in health outcomes by race and ethnicity in Arkansas and the factors that contribute to the observed health and healthcare disparities.

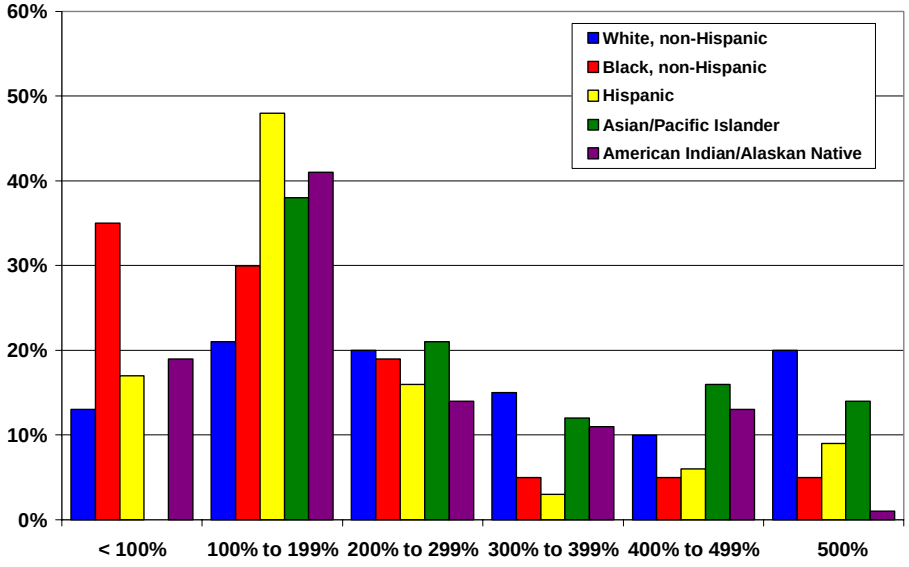
The study was done in two phases. **In phase I**, multiple data sources were identified that contain state-level information about the demographics, socioeconomic status, health behavior status, and the health outcomes of all available racial and ethnic groups. These data, as well as information on healthcare utilization and workforce, were then analyzed and summarized. **In phase II,** a series of 15 focus groups were conducted across the state in minority and majority communities to help provide insight into the factors that contribute to health and healthcare disparities.

Phase I Findings:

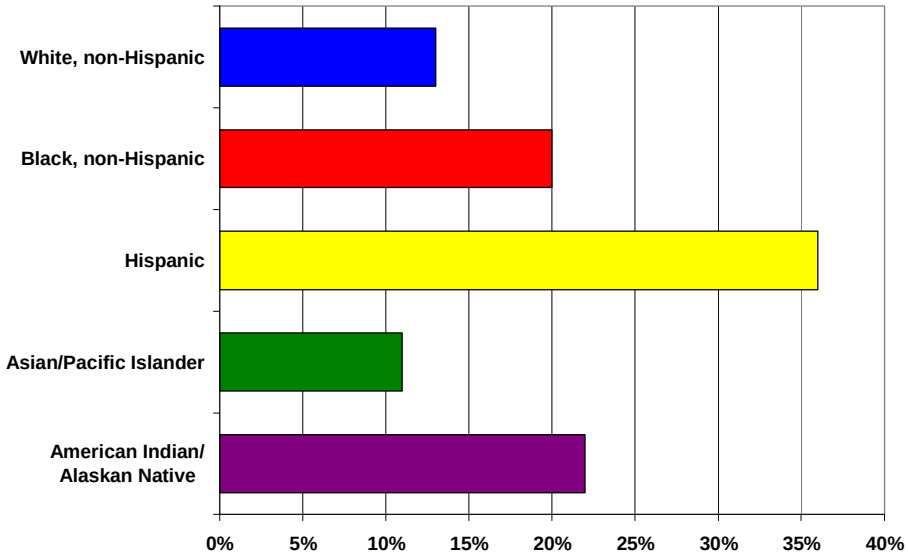
Arkansas has become more diverse over the last ten years. This is largely due to the growth of the Hispanic (greater than 300% growth from 1990-2000) and Asian populations. In fact, the rate of growth for Hispanics is among the fastest in the nation. African Americans make up a larger proportion of people in the state compared to the US and are located mainly in the southeastern half of the state. Asian and Latino populations are spread throughout the state but concentrated along the western border and in the central region. In general, these diverse populations are younger than the White population in the state.

Social factors such as income, employment, health insurance status and English speaking ability have an impact on health. In Arkansas as in the US, African Americans and Hispanics are more likely to live in poverty, be unemployed, have lower educational attainment and lack health insurance. Hispanics are by far the group most likely to be without health insurance. Additionally, significant proportions of Asians and Hispanics have limited English-speaking ability. The inability of a healthcare provider to communicate with a consumer has a potentially devastating impact on healthcare access and the health outcomes that result from poor access.

Federal Poverty Levels by Race and Hispanic Origin, 1999-2001

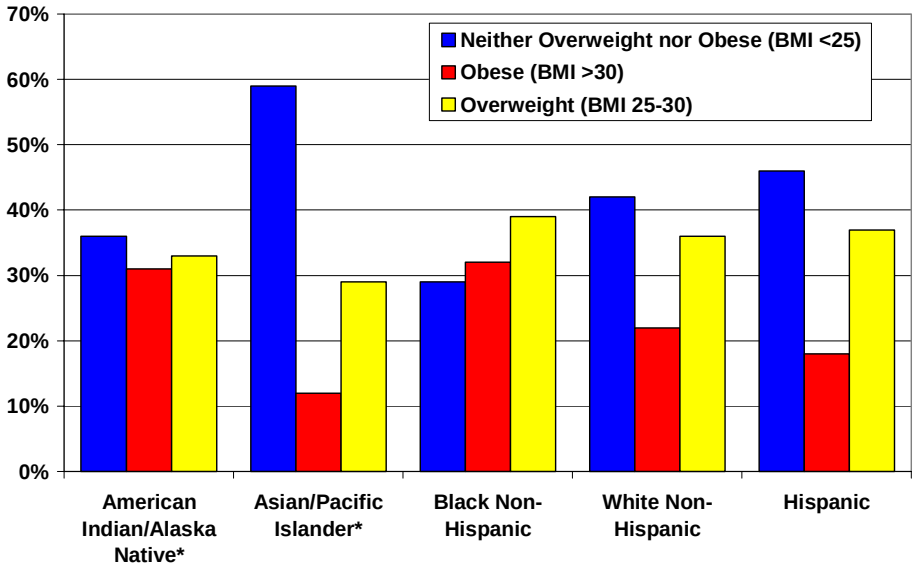


Lack of Health Insurance by Race and Hispanic Origin, 1999-2001

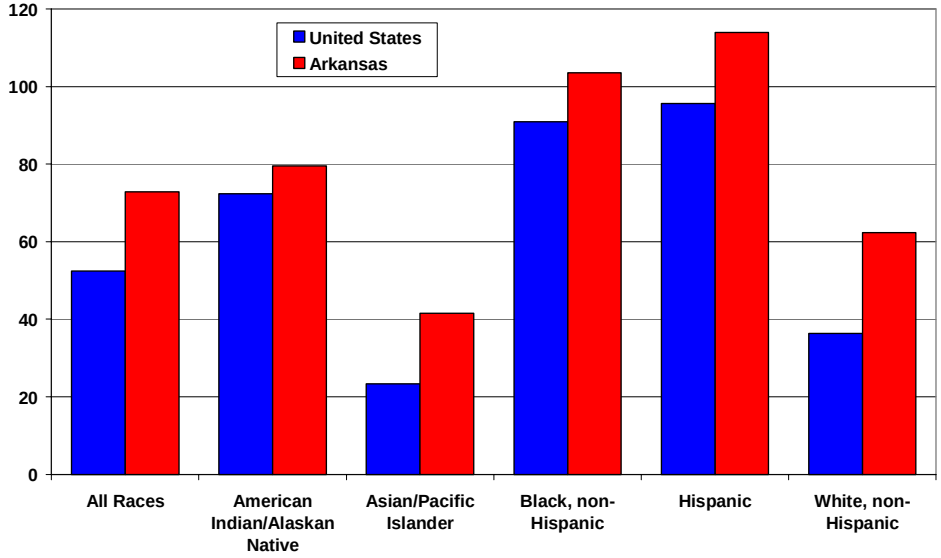


Health behaviors, such as smoking, physical inactivity, eating habits and teen pregnancy have a major impact on individual and population health. Although most Arkansans rate their health as excellent, very good or good, many have chronic diseases and few engage in activities such as exercise and the consumption of fruits and vegetables that promote health. Furthermore, nearly 3 of 4 African Americans and over half of Whites and Hispanics report they are overweight or obese. Against a backdrop of teen birth rates that are higher than national figures, Hispanic and African American teens have much higher birth rates than their White peers.

Overweight or Obese, 1999–2001

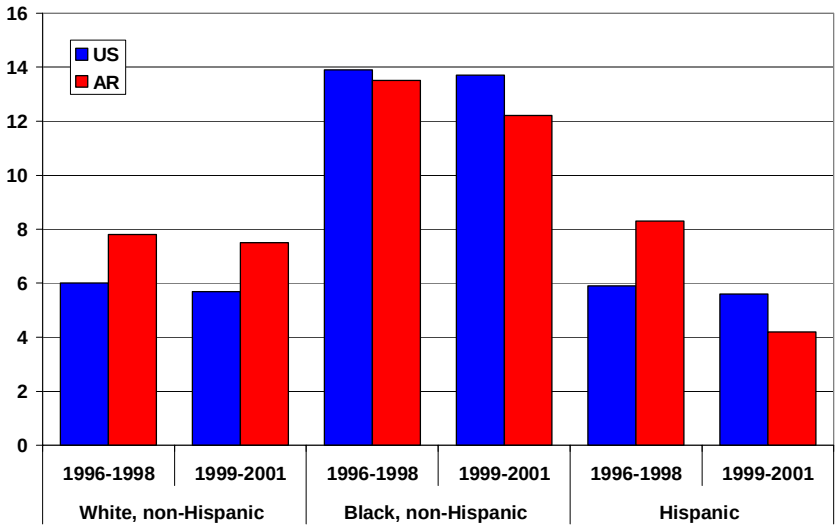


Birth Rate per 1,000 Females Aged 15–19 Years, 1996–1998

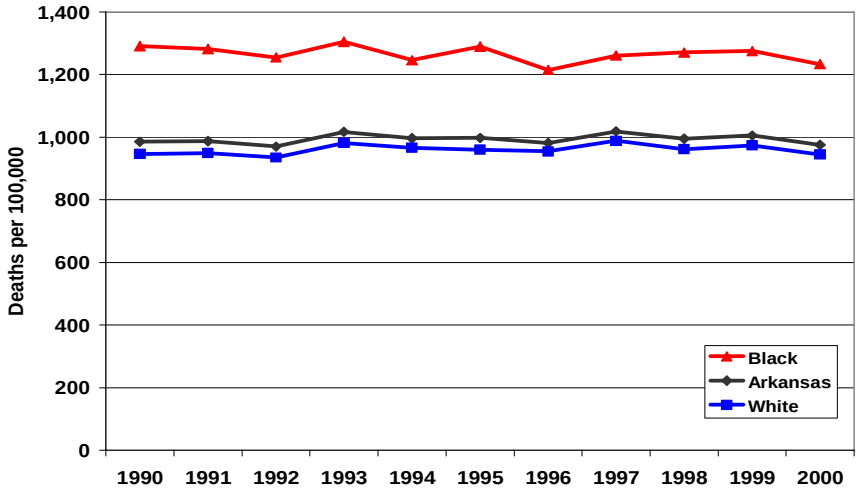


Arkansans die at a higher rate than other Americans. The state mortality rate for 2001 is 11% higher than the national rate. Minority mortality data is limited to the African American population. From 1990-2000 a significant difference in mortality between African Americans and Whites is persistent. Overall, the mortality rate for African Americans is 31% higher than for Whites. In terms of infant mortality, African American infants have a 63% higher mortality rate than White infants.

Infant Mortality Rates per 1,000 Live Births by Race and Hispanic Origin



Arkansas All Cause Mortality by Race 1990-2000



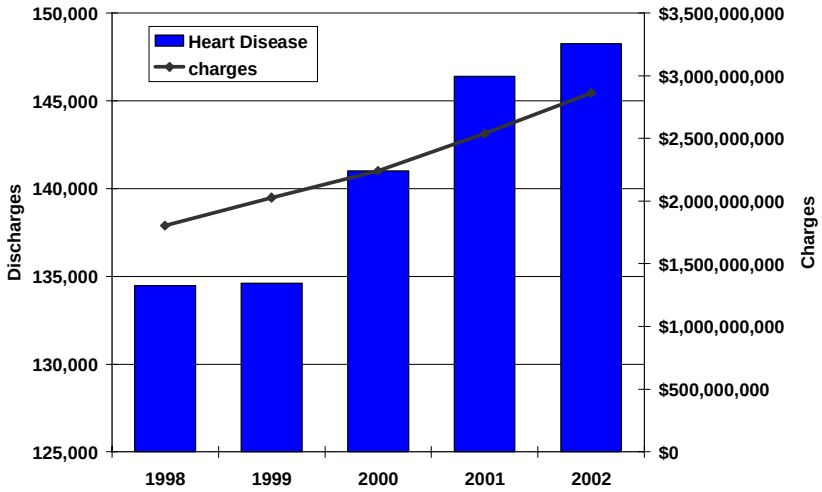
For specific diseases, there is widespread disparity in mortality between African Americans and Whites (Table 1). Most of these differences were statistically significant, that is unlikely to occur by chance. Only for mortality from lung cancer and motor vehicle accidents was there not a statistically significant difference between Whites and African Americans. Worse still, for mortality from diseases such as colorectal cancer, breast cancer, prostate cancer, diabetes and HIV/AIDS the disparities are increasing.

TABLE 1. Arkansas Racial Health Disparity

	Black/White Disparity
Infant Mortality	+63%
Heart Disease	+25%
Ischemic heart disease	+21%
Lung Cancer	+1%
Colorectal Cancer	+46%
Breast Cancer	+43%
Cervical Cancer	+136%
Prostate Cancer	+143%
Stroke	+45%
All Accidents	+19%
Motor Vehicle Accidents	+2%
Diabetes	+152%
Asthma	+194%
HIV/AIDS	+242%
Homicide	+490%
All Cause Mortality	+31%

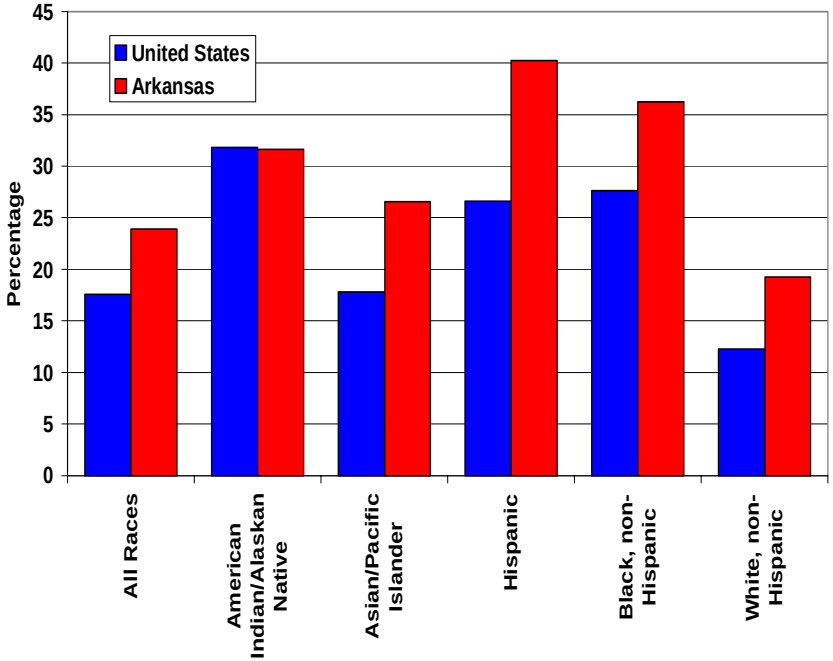
The economic impact of diseases that cause the most death in Arkansas, such as heart disease, cancer and stroke, cannot be overstated. For heart disease in general, and for the more specific ischemic heart disease, hospital discharges increased modestly from 1998-2002 but total charges grew by nearly 33% to over $3 billion. It is clear from these data that even minor improvements in disease burden, treatment and prevention would have a significant positive economic impact. Hospital charges for unintentional injuries, asthma and all cancers, all conditions that disproportionately kill African Americans, are rising rapidly as well.

Hospital Cases: Discharges and Charges



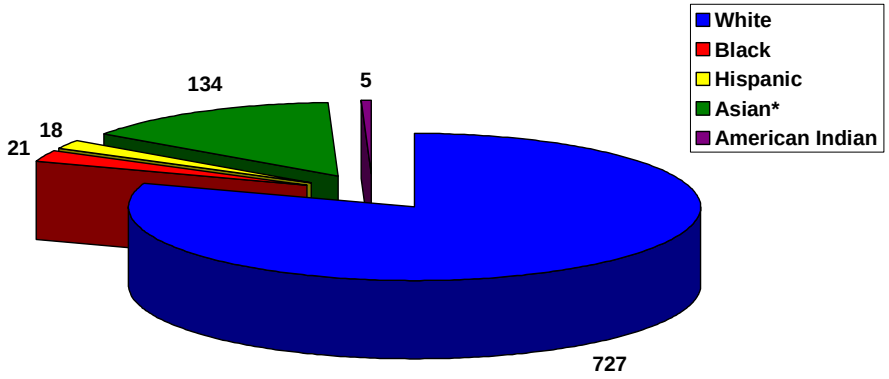
The use of preventive measures such as immunizations and screening tests such as mammograms is an important factor in reducing disease burden. Most Arkansans do not get an annual flu vaccine. Hispanic and African American women are less likely than White women to have a mammogram or receive prenatal care in the first trimester of pregnancy. 1 of 4 Whites and 1 of 3 African Americans have never had blood cholesterol checked.

Women Not Receiving First Trimester Prenatal Care, 1996–1998

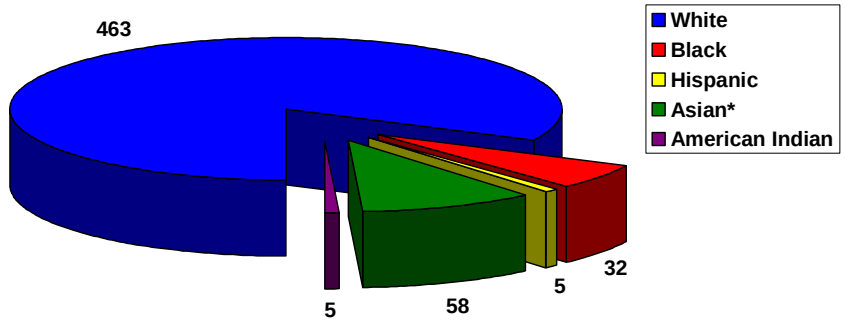


Professionals that make up the healthcare workforce are more plentiful in number and in ratio to the population in Central and Northwest Arkansas. The Southeast Public Health Region has the least healthcare professionals, across all professions except physicians, per population. Given the increasing diversity of the state's population, an examination of trainees and faculty at the state's major health professions institution reveals under-representation of minorities across nearly all disciplines.

UAMS College of Medicine Full-Time Faculty with Primary Appointments 2002-2003



UAMS College of Medicine Student Enrollment 2002-2003



**Asians are not considered to be under-represented minorities in Medicine by the American Association of Medical Colleges.*

Phase II Findings:

Group interviews were held in 15 communities around the state to give minority and majority people an opportunity to share their experiences in the search for good health. 149 Arkansans participated in focus groups that were held in each public health region. Group members were of the same race and Latino groups were conducted in Spanish. The conversations from these groups enrich the data on health outcomes, risk factors and utilization and complete the picture of health and healthcare disparities. The themes that emerged from the focus group discussions pointed to a healthcare system that is far from perfect for any individual, but worse so for an individual that is a minority, poor, uninsured, elderly or speaks a language other than English. On top of that, troubling stories were told of how minority individuals face additional obstacles due to skin color, language or preconceptions of caregivers about a minority person.

The following themes emerged from the group interviews:

- **In many minority communities the thermostat or frame of reference for health is set on "sick" as participants have come to view health only in terms of ability to work or carry on basic activities. Many accept chronic illnesses as part of life.**

- **Several socioeconomic factors, most importantly poverty, compete and often overshadow individual and community health.**
- "I was worried, but then I said I'm not going to worry no more. I said because God is going to take care of me. I said he done brought me this far. For Christmas, we had a good Christmas. We had food. We had roof over our heads, and my son said, 'Well, mama you don't have to get me nothing'. And that was the most important thing to hear him say that. He said, 'You don't have to get me anything. The only thing I need from you is love'. When he said that everything was nice."
- **Personal negative experiences with healthcare providers or institutions and a sense that parts of the system are only motivated by profit have led to a building mistrust and suspicion of the healthcare system**. In one county, there was a clear difference between what a Caucasian and an African American participant thought of the local hospital:
- Caucasian: "And we've got to support it. And the truth of the matter is none of us are trusting doctors all that much. I'm not sure our trust is any higher from Little Rock than here. What I'm suggesting is that we have a false sense of thinking things are better in Little Rock. And so I think we need a PR campaign for our hospital, some stories of our successes out there."
- African American: "Don't take my dog down there... I said I don't take my dog. We don't know where white folks be going. We don't know what they do, because I haven't been in (local) hospital since 1957. They sewed my head up with some grass. You know, if I had to talk about that incident versus the incidents that I hear about sometimes on a weekly or monthly basis, they just don't have a very good record for caring for Black people I know."
- **There are many barriers such as poverty, lack of insurance, fear, inability to speak English and a lack of cultural awareness by providers that**

impede the individual's access to quality healthcare and good health.

- "Yo creo también es como es uno tratado, como lo tratan a uno cuando va a su doctor. A veces…he llevado personas al doctor y entonces, si no hablan ingles…yo pienso que hay discriminación porque a veces no les hacen las mismas preguntas que a alguien que habla ingles le hacen. (I think it's also how you are treated, how you are treated when you go to your doctor. Sometimes…I've taken people to the doctor and then, if they don't speak English…I think there's discrimination because sometimes they are not asked the same questions that are asked of someone who speaks English.)"
- **The function and dysfunction of the physician-patient relationship is a major factor in driving the behavior of the healthcare consumer.**
- "Do more examinations. What most of us are saying is that as patients they are not being examined. They are asking them by word of mouth, "What is your problem? So you say this is your problem, then I'm going to write you this prescription for what you say is your problem." And it shouldn't be that way. They should be diagnosed. I should be diagnosed if I go there and say I'm sick."
- **Minority participants have experienced inequalities in the healthcare system and at times were able to identify that poor treatment was connected to their race or ethnicity. However, race or ethnicity was often difficult to separate from other socioeconomic factors that could impact poor treatment.**
- "Same with my kid, but the only thing she doesn't want to say, this other person, her child was white. I feel like that because there was such an epidemic going around with this flu, my child was diagnosed saying, 'Oh, he's got the same thing. He's got the (town) crud,' and you get cough medicine. A lady I work with took her daughter to the same doctor the same day; she had the flu. She gets an antibiotic. So my concern is when there is an epidemic or something like that with the flu, will the African Americans, will we be left out, you know? Will the medicine be given to the other people and we'll just be left out? And just like with the flu, will we be the last person told? Will we not be served because the other people are getting that first and where are blacks concerned? I mean if we don't stop it now it's going to get on to something worse later on. I think something needs to be done now."
- **Focus group members often made recommendations on how to improve the problems that were discussed.**
- "Yo nomás quiero afinar un punto aquí…yo no creo que nosotros los hispanos estamos esperando que venga el gobierno a traernos programas especiales porque somos Mexicanos, no creo que nadie estamos pidiendo eso. Nosotros solamente pedimos que ya están estos programas llevando, siendo llevado a cabo en otras partes, que se presenten también a nosotros. Yo creo que si pagamos impuestos tenemos los mismos derechos y yo no digo que tengan esto porque son Mexicanos, no, nosotros también pagamos impuestos, somos ciudadanos la mayoría, ya aquí o residentes, y estamos pagando impuestos. Y si ya estos programas están llevando a cabo en otras partes que también se ofrezcan a nosotros. (I just want to clarify a point here…I don't think that as Hispanics we're waiting for the government to bring us special programs because were Mexican, I don't think any of us are asking for that. All we are asking for is the

programs that are already being done in other places that they also are made available to us. I think that if we are paying taxes we have the same rights and I'm not saying they should have this because they are Mexican, no; we also pay taxes, the majority of us are citizens or residents and paying taxes. And if these programs are being carried out in other places they should also be offered to us.)"

Recommendations:

- As this study documents, there are large disparities in death rates and disease burden between minority and non-minority populations. These disparities in death rates have persisted and for diseases such as colorectal cancer, breast cancer, prostate cancer and diabetes seem to be worsening. Public and health policy decisions must be evaluated in light of these disparities. Furthermore, those decisions must be based on accurate data for specific populations.
    - All health, healthcare quality and mortality data must be consistently recorded and reported by race and Hispanic origin.
    - Minority populations must be over-sampled in health surveys to have sufficient numbers of responses on which to base conclusions, and survey tools needs to be administered in languages other than English.
    - The Arkansas Tobacco Settlement Commission (ATSC) must be a check and balance body to ensure all new and expanded programs that utilize tobacco funds accurately record and report the impact of the programs on the populations that experience the disparities documented in this study.
    - Consideration should be given to a health information survey done with minority Arkansans to assess health inequalities on a large scale.
- Focus group participants sought providers, often of their own race, cultural backgrounds or spoken language, because they felt better cared for and better understood. Other participants simply wanted a provider, regardless of race or ethnicity, who would listen to them and make an effort to understand their needs. However, given the low percentage of minority trainees and faculty documented in this study, it is essential to improve not only the diversity of students and faculty but also the cultural competence of all trainees and faculty currently in medical, nursing, pharmacy, allied health and public health schools.
    - Recruitment and retention of minority faculty and students must be increased.
    - Cultural competency must be integrated throughout the health professions curriculum.
- Healthcare institutions play a clear role in the treatment of disease on the individual level, but as the focus groups illustrated, populations with

poor health outcomes and negative experiences with healthcare systems have lost trust in the very institutions that are in their community. This loss of trust impacts the behavior of consumers and would delay treatment at best, or hasten death at worst. Hospitals, provider groups and public health clinics cannot eliminate health disparities alone, but are an important element of service improvement to all populations, specifically those experiencing inequalities in care.

  - Formal and informal minority leaders must be included on hospital boards, planning committees and other decision-making bodies at the local and state levels in order to restore trust in healthcare providers and institutions.
  - Institutions must be more aware of the diverse cultures, languages and needs of their patient population. Institutions must then move from improved awareness to increased responsiveness to the particular needs of the populations they serve, including those subject to the disparities outlined in this study.

- The workforce data show that Arkansas has a lower density of physicians than the national average and that the fewest healthcare providers in number and proportion are frequently in the Southeast and Southwest public health regions. The African American population and some Hispanic communities are more concentrated in these regions. Healthcare consumers already disadvantaged by low provider density spoke in the focus groups of a higher value placed on positive relationships with their healthcare providers. Indeed, what outcome can be expected when a physician spends less than five minutes with a patient from a different culture about whom the physician knows little, if anything? Stories told about healthy provider-patient relationships often were based on the personal concern shown by the provider. This was even more helpful when the provider was of a different racial or ethnic background and did not speak the primary language of the consumer. Therefore, as the current healthcare workforce understands more about the communities they serve, these relationships will improve.
  - The current healthcare workforce must improve its cultural competence.
  - The cultural and linguistic appropriateness of health services must be increased.
- The health disparities documented in this study cannot be solved by one agency, institution, provider or community working alone. However, communities are a natural avenue for engagement around racism and discrimination experienced in the healthcare system. Additionally, discussing healthcare access and quality issues, engaging in risk factor education and targeted, population-based interventions to address particular problems identified in the

community can be done. Mention was made in many focus groups for the need to know that healthcare providers and systems care about the health of minority residents. Effort must be made to include formal and informal minority leaders in this process as well as on hospital boards, planning committees, quorum courts, and other decision-making bodies at the local, state and national levels in order to restore trust in healthcare providers and institutions. Counties with the highest age-adjusted all-cause mortality rates, for any racial or ethnic group (Phillips, Mississippi and Crittenden, for example), would be a natural place to begin this work, with special attention paid to diseases for which large disparities exist between Whites and African Americans (HIV/AIDS, Diabetes, Prostate Cancer, Stroke, for example).

- In order to improve health, racism must be evaluated as an element of healthcare inequality.
- Local communities must identify problems with healthcare access and quality and formulate solutions.
- Local communities and consumers must identify problematic risk factors and develop strategies for reducing risky behaviors that fit their community.

INTRODUCTION

OVERVIEW

Health is defined as the mental and physical well being that allows one to develop to the fullest potential. Health is a precious resource that also allows for the development of meaningful relationships in families and a full, productive life. Over the last 100 years, the nation's health has greatly improved. Remarkable improvements in areas such as decline in infant mortality, increased life expectancy, control of communicable infections, and technological advancements have all been achieved.

However, all Americans have not realized these improvements. There are significant and often dramatic differences in health status by both region and by race and ethnicity. Hand-in-hand with these disparities in health status is mounting evidence that documents healthcare disparities as well.[1] That is, there are differences in the receipt and distribution of medical resources and treatments by race and ethnicity. The causes of these health and healthcare disparities are a complex interaction of social, environmental, behavioral, and healthcare system organizational factors.

These differences have increasing importance and impact on the nation's health because the Untied States and the state of Arkansas are becoming more diverse.

From 1990 to 2000, the population in Arkansas increased 13.7% compared to the national increase of 13.2%. This growth is largely accounted for by increases in the state's Hispanic and Asian populations.[2]

The rapid increase of the Hispanic population in Arkansas was largely unexpected, as evidenced by population projections in 1996 that suggested the state's current population would be 2% Hispanic. Census 2000 data show 3.2% of Arkansans are Hispanic or Latino, although due to historical undercounts among minority groups, there are likely to be more Hispanics in Arkansas than these data show. Nationally, Hispanics are now the largest minority group and will continue to grow rapidly in Arkansas and across the country. By 2030, almost 40% of the US population will be an ethnic or racial minority, and 49% of the population will belong to a racial or ethnic group by 2050.[3]

Race/Ethnicity	*1990 (% pop)*	*2000 (% pop)*	*% Change*
White	82.7	80	-3
African-American	15.9	15.7	-1
Hispanic/Latino	0.8	3.2	+300
Other*	1.3	3.1	+138

[1] Smedley BD, Stith AY, Nelson AR, Editors. (2003). *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare.* Washington, DC: The National Academies Press.

[2] U.S. Bureau of the Census. (2000).

[3] U.S. Bureau of the Census, Population Division, Population Projections Branch. (2004).

Given the nationally documented differences in health and healthcare by race and the changes in the US and Arkansas populations, it is critical that racial and ethnic health disparities be examined, understood, and eliminated. If the health of people in the United States is to continue to improve, the health of minority populations must also improve. This fact has been recognized on the national level by ***Healthy People 2010***, a set of health objectives for the nation to achieve over the first decade of the new century.[4] *Healthy People 2010* has two objectives: (1) to increase the quality and years of healthy life and (2) to eliminate health disparities among different segments of the population. By striving for these ambitious goals, a healthy, prosperous nation for all Americans may be realized.

PURPOSE

The purpose of the ***Arkansas Racial and Ethnic Health Disparity Study*** is to describe the differences in health outcomes by race and Hispanic origin in Arkansas and the factors that contribute to the observed health and healthcare disparities. It is envisioned that individuals, communities, organizations, and policymakers will utilize this descriptive study of minority health in Arkansas to develop and target effective interventions to improve the health of all Arkansans.

This project has three goals:

1. Examine, analyze, and summarize existing data reflecting minority health and health disparities in Arkansas.
2. Collect and analyze data obtained via focus groups in local communities to assess knowledge, attitudes, and beliefs about health and the healthcare system and to identify barriers encountered when trying to access healthcare.
3. Generate further research questions and propose recommendations to eliminate racial and ethnic health disparities in Arkansas.

METHODS

The *Health Disparity Study* was submitted to and reviewed and approved by the University of Arkansas for Medical Sciences (UAMS) Human Research Advisory Committee (HRAC) to protect the rights and welfare of the participants.

In **Phase I**, multiple data sources were identified that contain state-level information about the health status of minorities. These sources include mortality data, hospital discharge data, Behavioral Risk Factor Surveillance System (BRFSS) data, and healthcare workforce data. Other data sources that describe the socioeconomic environment of minorities in Arkansas were also identified. These data sources, which were accessed and analyzed via the Multi-State Integrated Database of the Arkansas Center for Health Improvement (ACHI), include Census 2000 and its Current Population Survey and Internal Revenue Service County Business Patterns. Each of these databases is detailed in **Appendix B**.

In **Phase II**, a series of 15 focus or discussion groups were conducted across the state in each of the public health regions (**Appendix C**). A total of 149 individuals participated in these groups. There was an average of 8

[4] U.S. Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health*. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000.

participants per group and members were of a single race or ethnic group. Discussions were held among 7 African–American groups, 4 Hispanic groups, 3 Caucasian groups, and 1 Asian group. Individual interviews were performed in other populations when possible. The discussions included perceptions of health, sources of health information, access to care issues, community health issues, and prior experiences with the healthcare system.

As a result of the data obtained from these multiple sources, a picture of minority health in the state of Arkansas is presented in this report, which includes a unique combination of a statistical description enhanced by input from real people in local communities.

LIMITATIONS

This report presents a picture of minority health in Arkansas. Because these data were collected by many agencies for a variety of uses, categories cannot be manipulated to answer specific questions and the data from different sources may not be directly comparable.

For the purposes of this report, where possible, the racial and ethnic categories and terminology used are consistent with the US Office of Management and Budget Statistical Policy Directive 15. The federal government standards, revised in 1997, direct the reporting of race data in these categories: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or other Pacific Islander, and White. Ethnicity data is reported in two categories: "Hispanic or Latino" and "Not Hispanic or Latino." Therefore, a person of Hispanic origin may be of any racial category.[5]

During Census 2000, individuals were allowed to check multiple race categories for the first time in history. While this respects individual family history and heritage, it may make the ability to track known racial and ethnic health disparities more difficult. In Arkansas, 35,744 persons (1.3%) stated that they were of two or more races.[6] For the purposes of this report, data for those who report a single race are utilized.

Although the racial and ethnic makeup of Arkansas has changed substantially in the last 10 years, systematic data collection and reporting on mortality, morbidity, and health behaviors has not reflected or adequately captured this increased diversity. Much of these data are still reported for "White, Black, and Other" groups; some are reported for "White and non-White." In some cases, small numbers of minority populations limit reliability of conclusions that may be made from the data. In other cases, the data may not accurately capture race or Hispanic origin or may be limited by underreporting. In this current report, all available data are presented, and indications are made where cautious interpretation is required.

Phase II of the study explored racial and ethnic health disparities at the individual and community levels. The discussion groups provided an avenue for communities to express their opinions and discuss personal experiences. These groups were not intended to reflect the entire local

[5] Office of Management and Budget. [Online]. Available: http://www.whitehouse.gov/omb/fedreg/1997standards.html [accessed March 22, 2004].
[6] U.S. Bureau of the Census, Census 2000.

community or the minority population of that community. Therefore, the results of these discussions may not be generalized to any other community or the state as a whole. However, the results speak for real life experiences and may provide an insight into why health disparities exist in Arkansas. Additionally, the discussions also point to avenues for further study and community action that may eliminate racial and ethnic health disparities.

ORGANIZATION

The report is divided into the following sections:

- **Demographic Profile:** This section describes the Arkansas population with respect to racial and ethnic composition. The variables described include population projections, age distribution, country of origin, language spoken, and geographic location.
- **Socioeconomic Profile:** Health and access to healthcare are undoubtedly affected by the socioeconomic status of a population. This section describes the poverty, educational attainment, employment status, health insurance status and other factors that impact health.
- **Health Behavior Profile**: Individual health behaviors may positively or negatively impact the health status of individuals and communities. As such, it is necessary to detail the health behaviors of Arkansans to address health disparities. Some of the behaviors examined in this section include diet, physical activity, obesity, and smoking.
- **Minority Health Profile:** Nationally, it has been shown that racial and ethnic minorities bear a disproportionate burden of death and disease. This section describes the leading causes of death in Arkansas and describes the disparities in the state's minority populations.
- **Healthcare Utilization:** Access to healthcare remains a major problem for many people in Arkansas. Financial access is one problem, but many other barriers to receiving care include language access, location of providers, acceptability of providers, and lack of transportation. This section also contains information on the use of known preventive services by the state's minority populations.
- **Healthcare Workforce Profile:** An examination of workforce composition is critical to the elimination of racial and ethnic health disparities. Not only is there a need for appropriate numbers of providers, but there is also a need for distribution of providers to rural and underserved areas of the state. This section illustrates the geographic distribution of healthcare professionals in the state and provides a description of current trainees.
- **Community Voices:** This section describes the focus group process and the individual and community health concerns from people. The stories, beliefs, experiences, and attitudes add a human dimension to the data profiled in previous sections. Themes that emerged from the focus groups are described to complete the picture of health and healthcare disparities.

This report utilizes a variety of data to describe the health of minority populations in the state of Arkansas. The description takes a broad approach to survey the many factors that affect individual and community health. The combination of looking at the changing demographics of the state against the background of the socioeconomic environment helps put health behaviors, healthcare utilization, and health outcomes in proper context. Only with a full vision of the state of minority health in Arkansas will health and healthcare disparities be addressed and eliminated. This report should be utilized to inform further

research, policy changes, and community interventions to eliminate racial and ethnic health disparities as suggested by the framework in **Figure 1**.

Arkansas Racial and Ethnic Health Disparity Study Framework

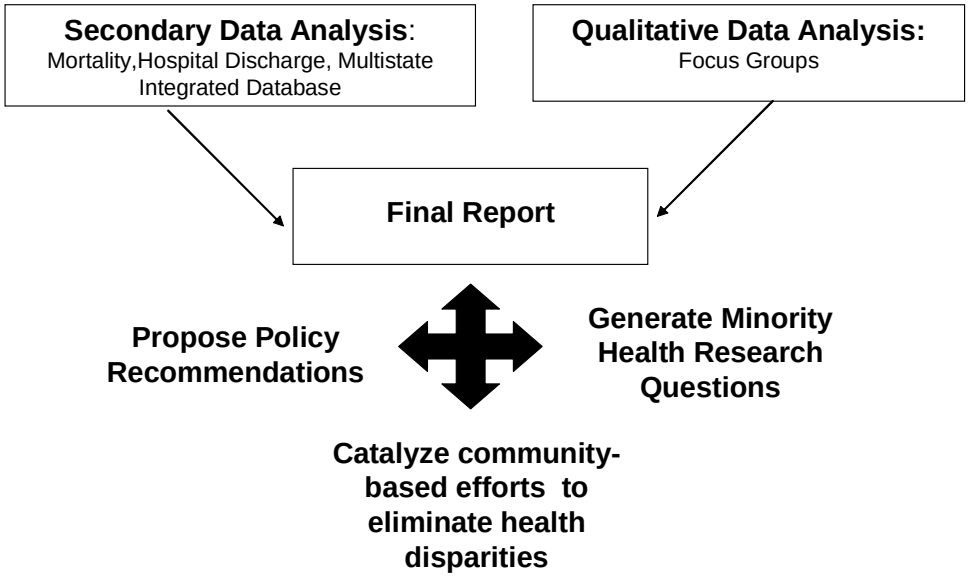


Figure 1: Project Framework

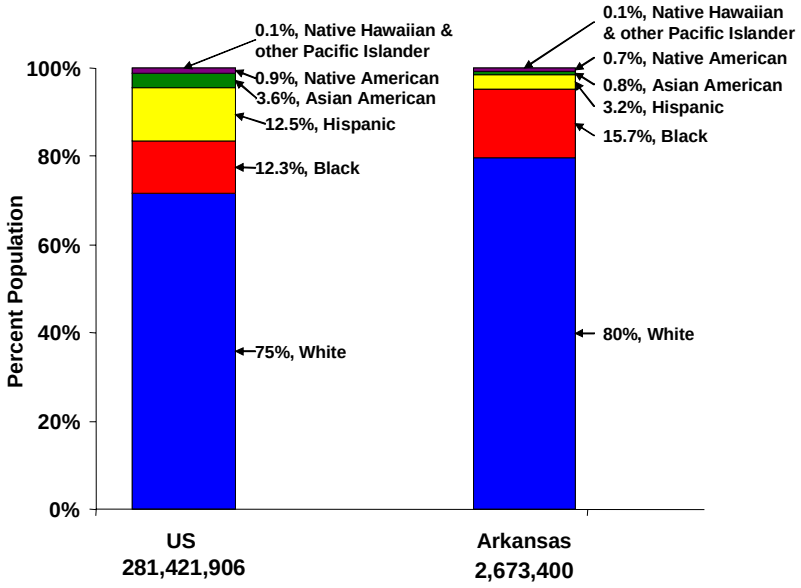
DEMOGRAPHIC PROFILE

- **Chart D-1: Total Population of the US and Arkansas by Race and Hispanic Origin, 2000**
- **Chart D-2: Arkansas Population Growth Projections by Race and Hispanic Origin, 1995–2025**
- **Chart D-3: Hispanic and Asian Populations by Origin, 2000**
- **Chart D-4: Population by Race and Hispanic Origin and County, 2000**
- **Chart D-5: Median Age by Race and Hispanic Origin and Sex, 2000**
- **Chart D-6: Total Population Age Distribution by Gender, 2000**
- **Chart D-7: Age Distribution by Race and Hispanic Origin and Gender, 2000**

Chart D-1

Total Population of the US and Arkansas by Race and Hispanic Origin, 2000

- Arkansas makes up about 1% of the total US population.
- The Hispanic and Asian populations in Arkansas are the fastest growing, although not as large proportionally as in the US population.
- The African-American population is proportionally larger in Arkansas than in the US.

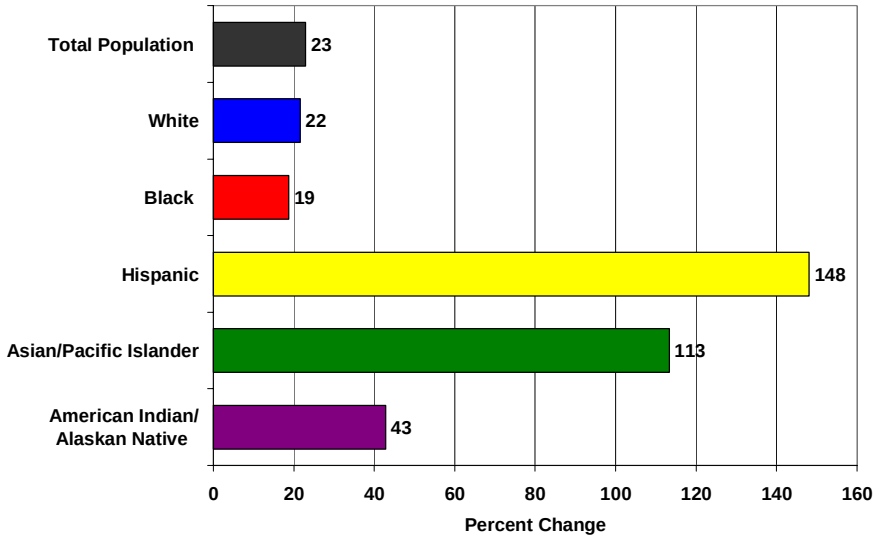


Source: U.S. Bureau of the Census, Census 2000, Summary File 1

Chart D-2

Arkansas Population Growth Projections by Race and Hispanic Origin, 1995–2025

- The most recent population projections from October 1996 anticipated but underestimated the rapid growth of the Asian/Pacific Islander and Hispanic populations.
- These projections estimated that the Hispanic population would be 33,000 in 2000. The actual count was 86,866.
- White and African-American populations are projected to have the least growth.

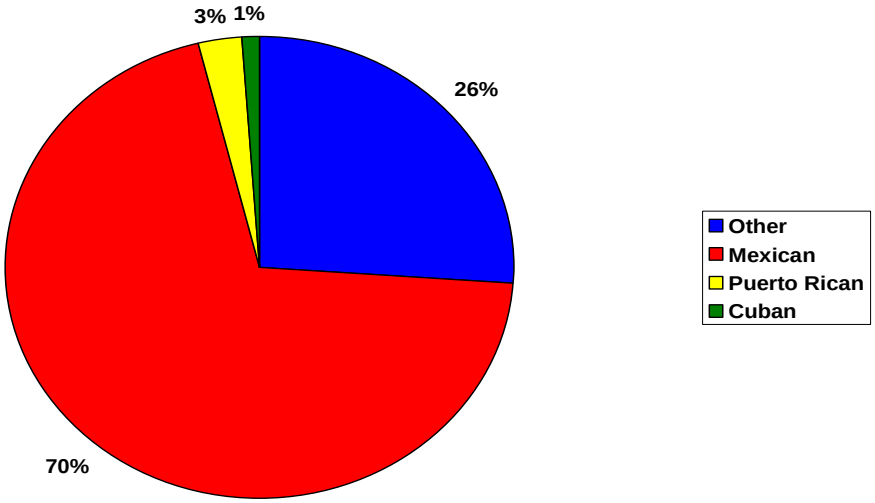


Source: U.S. Bureau of the Census. "Population Projections for States, by Age, Sex, Race and Hispanic Origin: 1995-2025.

Chart D-3
Hispanic and Asian Populations by Origin, 2000

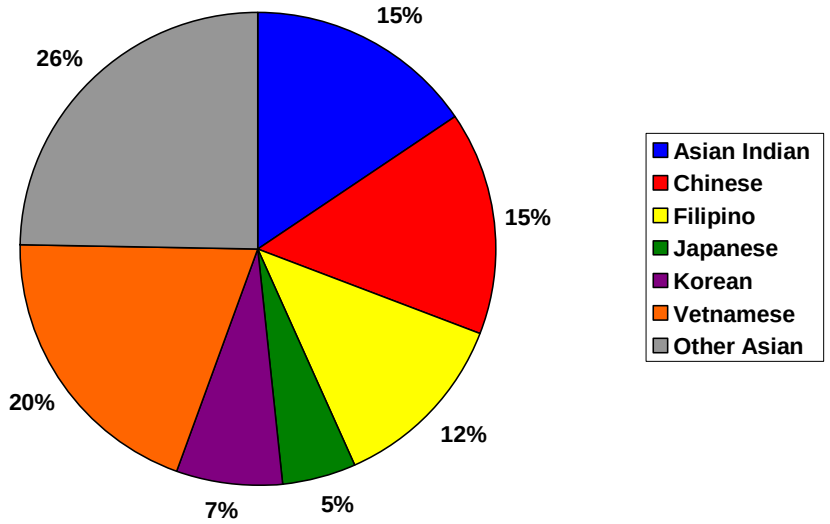
- Asians and Hispanics are of many different backgrounds.
- The majority of Hispanics are of Mexican origin, and most Asians are of Vietnamese, Chinese, Indian, or Filipino descent.

Hispanic Population



Other: Central Americans, South Americans, Dominicans, Spaniards and all other Hispanics

Asian Population



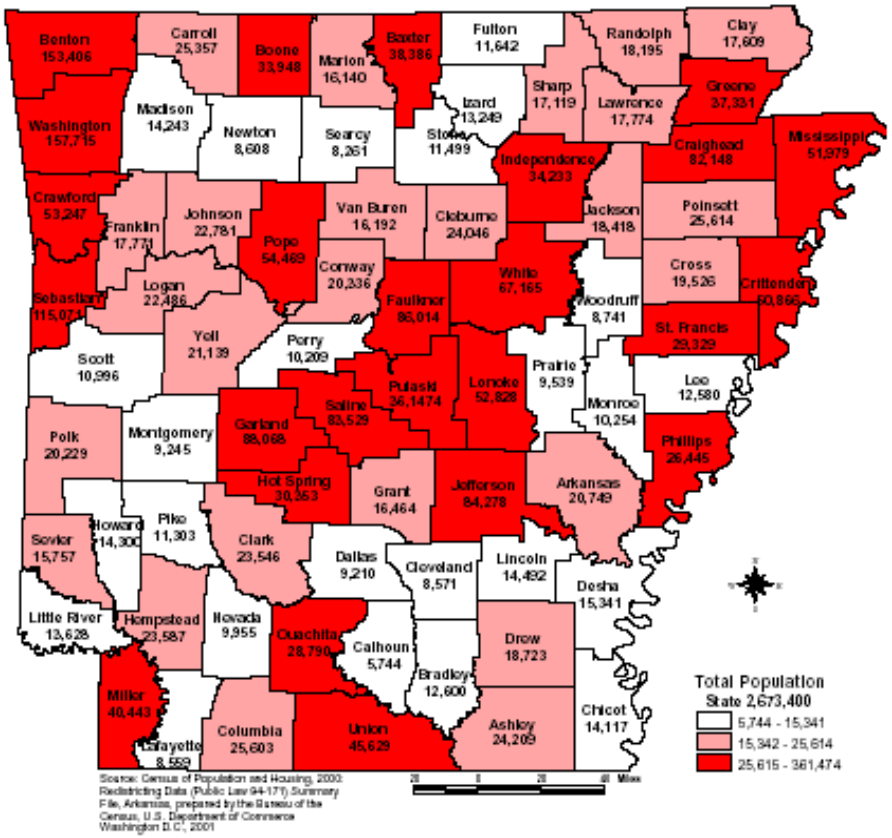
Other Asian: Other Asian alone or two or more categories
Source: U.S. Bureau of the Census, Census 2000, Summary File 1

Chart D-4

Population by Race and Hispanic Origin and County, 2000

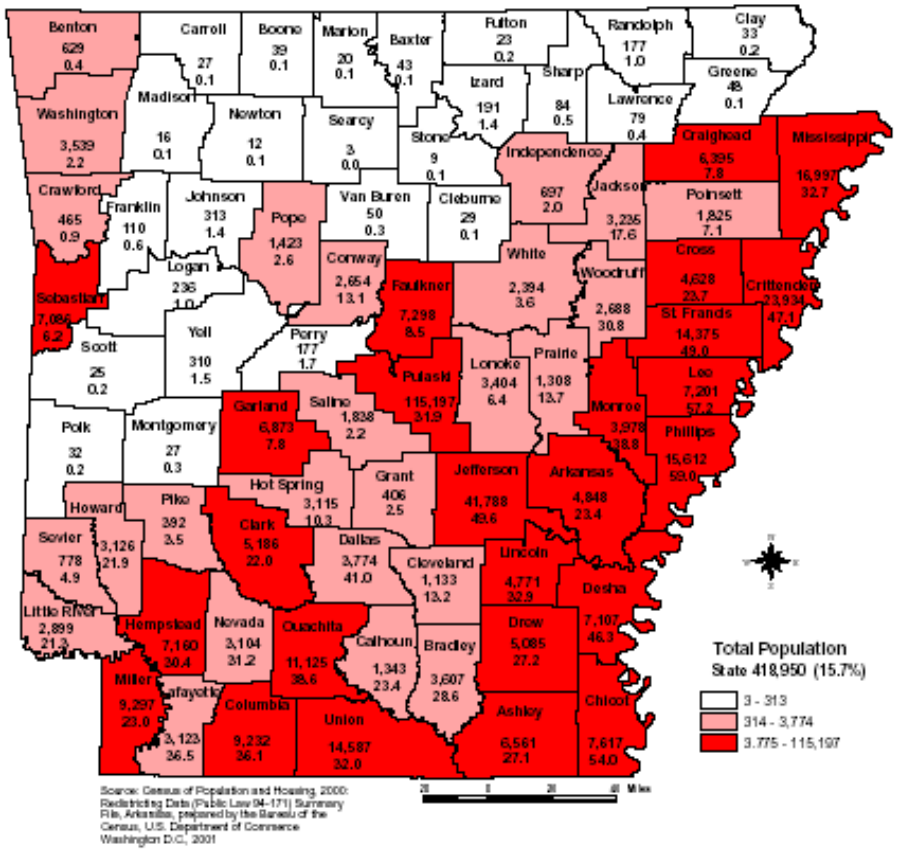
- 26% of the state's population is concentrated in Central Arkansas, and 22% is along the western border.
- African-Americans are concentrated in the southeastern half of the state with Phillips, Lee, and Chicot counties having the highest proportion of African Americans.
- Large Hispanic communities are located along the entire western border and in the Central and Delta regions. Benton and Washington counties have the most in number and highest proportion of Hispanics. Pulaski County has the next largest Hispanic community, and Sevier County has the highest proportion of Hispanic Arkansans.
- The concentration of other minority groups around the state is similar to the pattern of the Hispanic population.
- The Arkansas Public Health region with the highest proportions of African Americans is the Southeast Public Health Region, followed by the Central Region. The Northwest and Southwest Public Health Regions have the largest proportions of persons of Hispanic origin. The highest proportions of Asians are in the Central and Northwest Public Health Regions.

Total Population



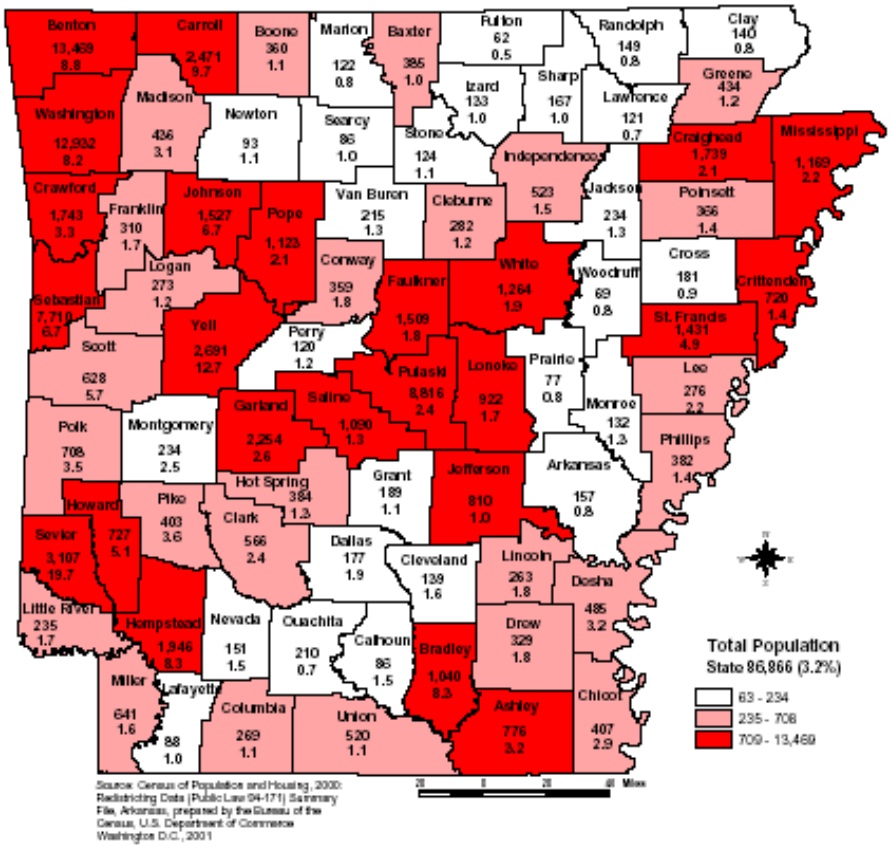
African American* Population: Number and Percent of County Total Population

(*one race only)

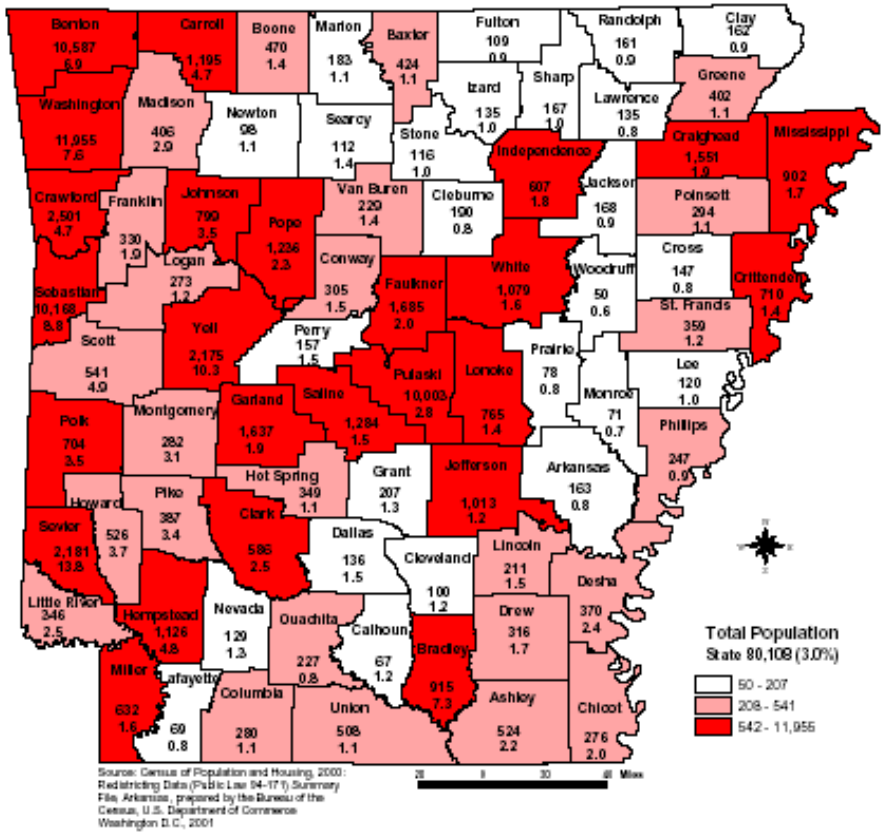


Source: UALR Institute for Economic Advancement, Census State Data Center: http://argis.ualr.edu/2000_Pop_Characteristics.htm.

Hispanic Population: Number and Percent of County Total Population



Other Races*: Number and Percent of County Total Population
(*one race only)

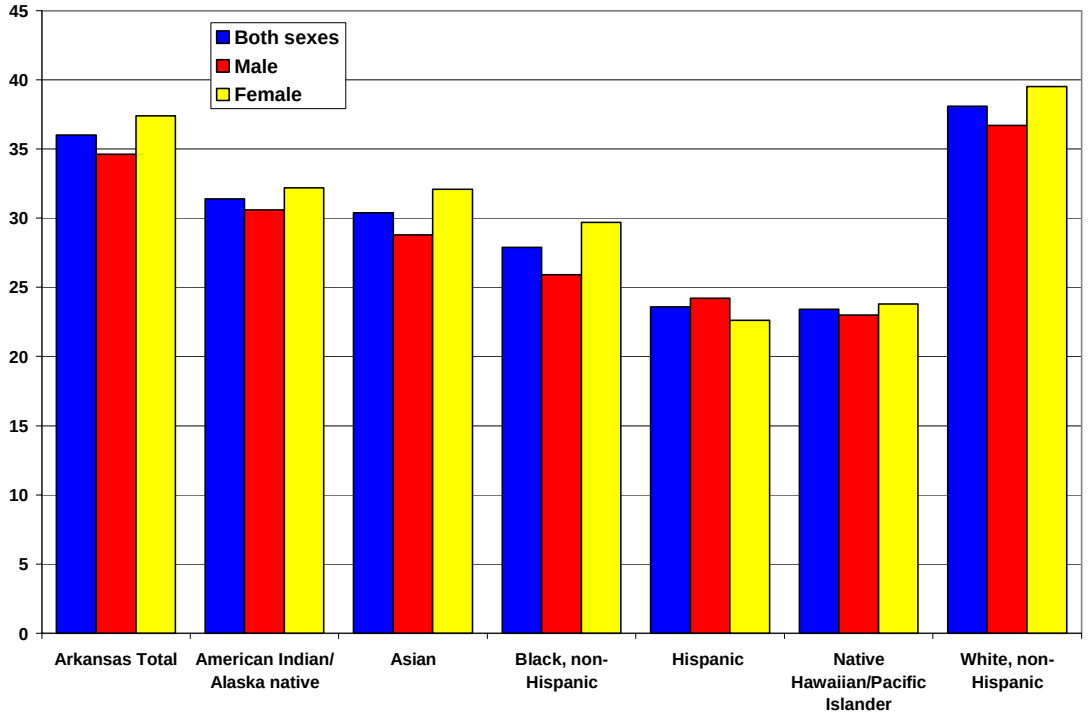


Source: UALR Institute for Economic Advancement, Census State Data Center: http://argis.ualr.edu/2000_Pop_Characteristics.htm.

Chart D-5

Median Age by Race and Hispanic Origin and Sex, 2000

- The median age of the Arkansas total population is 36 years, slightly higher than the US median age of 35.3 years.
- All racial and ethnic minority groups have younger median ages than the White and total populations.
- Hispanics and Native Hawaiian/Pacific Islanders have the lowest median age of 23.6 years; Hispanic females have the youngest median age in the state.

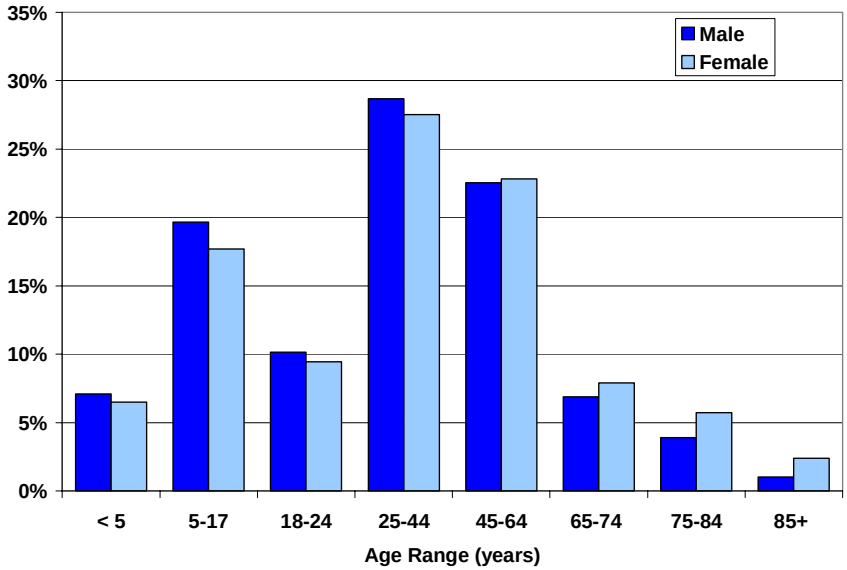


Source: U.S. Bureau of the Census, Census 2000, Summary File 1

Chart D-6

Total Population Age Distribution by Gender, 2000

- Females make up 51% and males 49% of the total population.
- Of the male population, 12% are age 65 or above, while 16% of females are 65 years of age or older.
- Of the male population, 27% are age 17 or below, while 24% of females are 17 years of age or younger.
- This graph is a reference point for the subsequent graphs illustrating the age distribution by racial and ethnic subgroup.



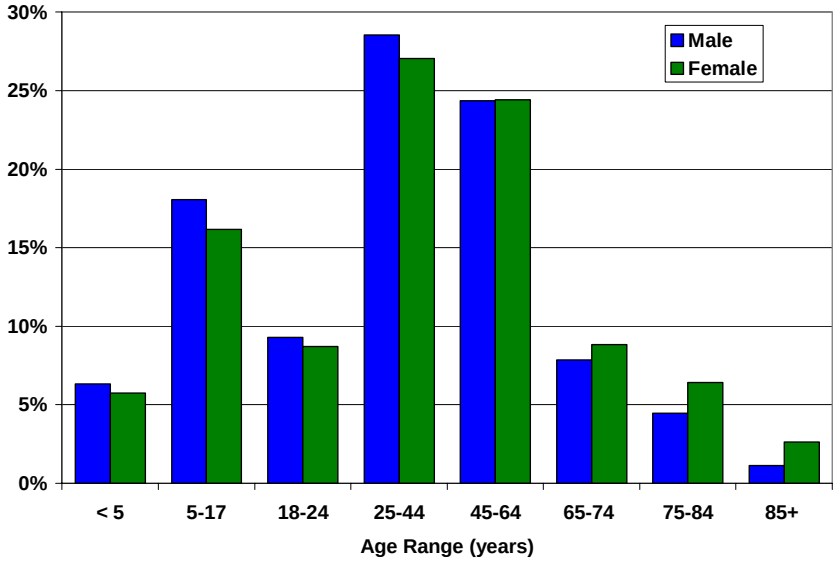
Source: U.S. Bureau of the Census, Census 2000, Summary File 1

Chart D-7

Age Distribution by Race and Hispanic Origin and Gender, 2000

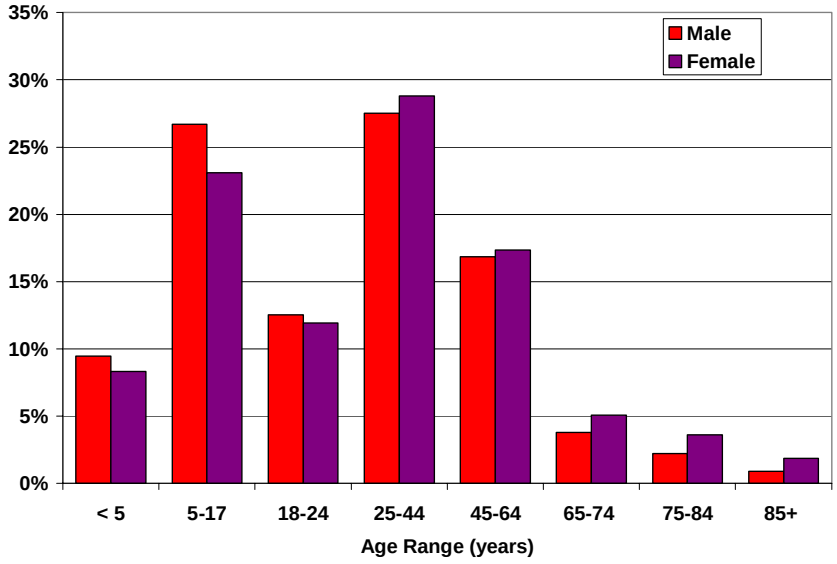
- The age distribution of the minority communities is shifted to younger age groups.
- Over 50% of Hispanics are under 25 years of age; 40% of Asians and 46% of African Americans are under 25 years of age.
- One-third of the White population is under 25 years of age.
- This age distribution supports the expected population growth in the next 10–20 years.

White Alone

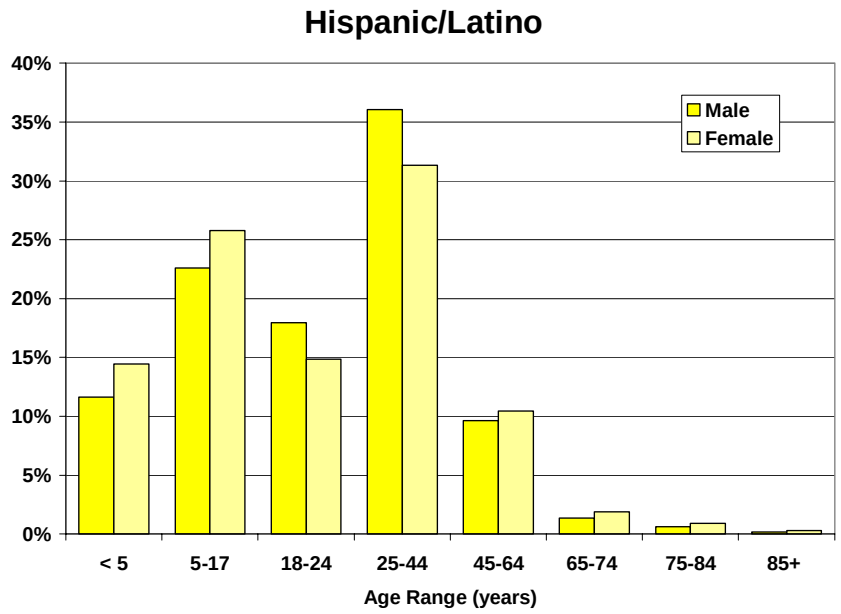


Source: U.S. Bureau of the Census, Census 2000, Summary File 1

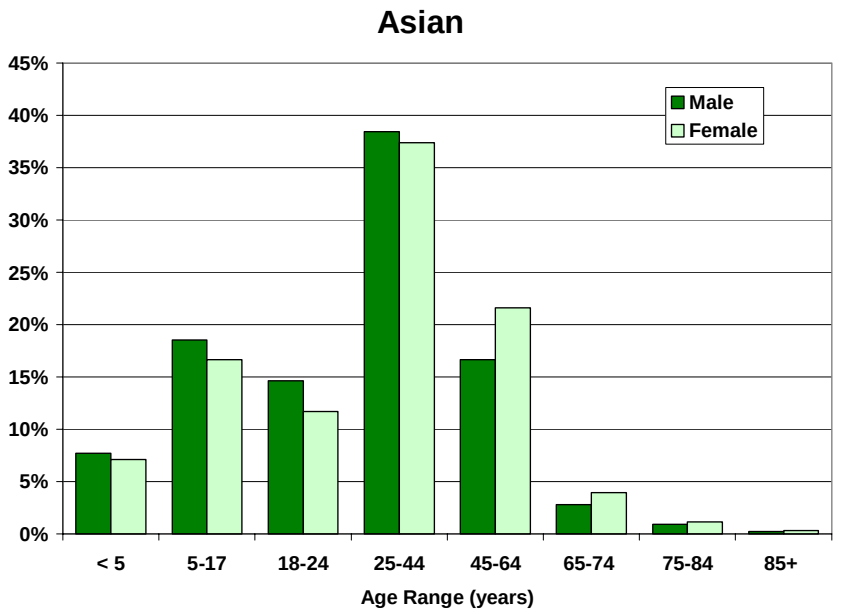
Black



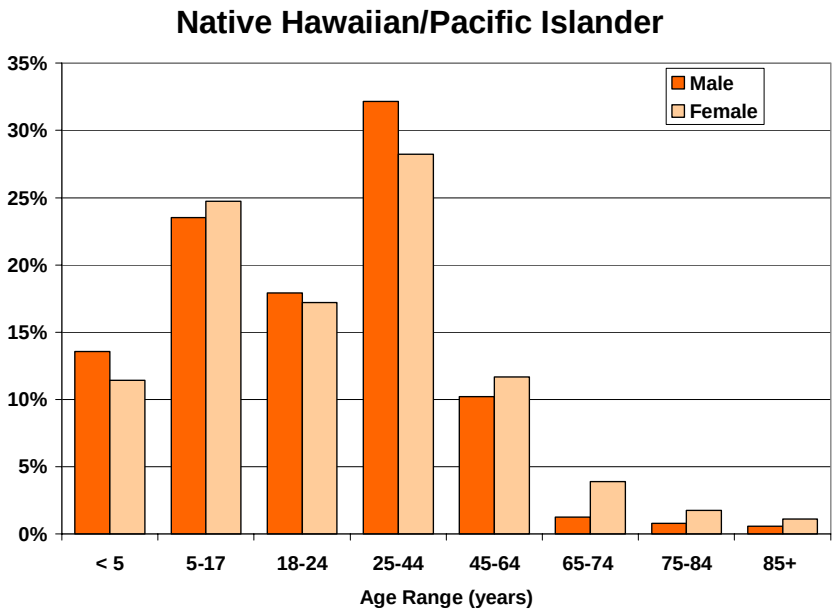
Source: U.S. Bureau of the Census, Census 2000, Summary File 1



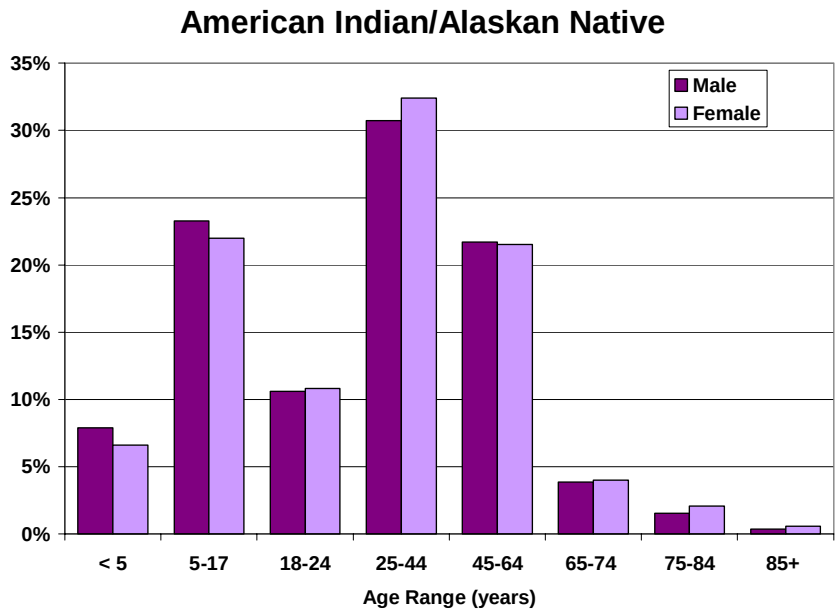
Source: U.S. Bureau of the Census, Census 2000, Summary File 1



Source: U.S. Bureau of the Census, Census 2000, Summary File 1



Source: U.S. Bureau of the Census, Census 2000, Summary File 1



Source: U.S. Bureau of the Census, Census 2000, Summary File 1

SOCIOECONOMIC PROFILE

- **Chart S-1: Arkansas Population by Federal Poverty Levels and Race, 1999–2001**
- **Chart S-2: Employment Status by Race and Hispanic Origin, 1999–2001**
- **Chart S-3: Employer Size by Race and Hispanic Origin, 1999–2001**
- **Chart S-4: Median Household Income by Race and Hispanic Origin, 2000**
- **Chart S-5: Educational Attainment for Persons 25 Years and Older, 2000**
- **Chart S-6: Urban vs. Rural Residence, 1999–2001**
- **Chart S-7: Medicare and Medicaid Coverage by Race and Hispanic Origin, 1999–2001**
- **Chart S-8: Private Health Insurance and Lack of Health Insurance by Race and Hispanic Origin, 1999–2001**
- **Chart S-9: Housing Status by Race and Hispanic Origin, 1999–2001**
- **Chart S-10: Number of Children in Household, 1999–2001**
- **Chart S-11: Family Type by Race and Hispanic Origin, 1999–2001**
- **Chart S-12: Asian and Hispanic Citizenship Status, 2000**
- **Chart S-13: Asian and Hispanic English-Speaking Ability, 2000**

OVERVIEW

To describe disparities in health and healthcare without examining the socioeconomic environment is to ignore a major determinant in the health of a population. Social factors put individual risk behaviors into context and may cause or directly affect health inequalities.[7]

The body of research that confirms the connection between socioeconomic status and health is substantial. In itself, poverty contributes to disease and death in both the developing and developed world.[8] As the gap between rich and poor countries widens, this income inequality will only lead to more health inequality. Other components of an individual's socioeconomic status include education, occupation, and wealth. The economic indicators of wealth and family income have been shown to be strongly associated with mortality, especially in women. That is, lower wealth and family incomes are associated with a higher risk of death.[9]

Race, and perhaps ethnicity, are not only related to socioeconomic status, but also thought to be determinants of health. Race has been suggested as a marker for racism that is embedded in society and may be one cause of race-associated differences in healthcare and health outcomes. There is currently ongoing research nationally with respect to how to measure racism and its effects. A theoretical framework for understanding racism has been offered by Dr. Camara Jones and deserves special mention.[10] In this framework racism functions on three levels: on the internal, personal, and institutional levels that may all affect individual and population health.

As the following charts will show, racial and ethnic minorities are overrepresented at the lower end of the socioeconomic scale. However, even when adjusting for these differences, minorities in the US still have worse health outcomes than non-minorities. That is to say, when minorities and Whites at the same socioeconomic levels are compared, minorities still fare worse. For Hispanics, who may be of any race, some subpopulations may have better health than would be expected given low socioeconomic position. However, there is much work to be done, especially in Arkansas, to understand risk behaviors, outcomes, and utilization of services in this population.[11]

Health may also vary with the neighborhood or community in which one resides even after controlling for individual health risk factors.[12] Some examples of these

[7] Chung KD. African-American health disparities: A literature review of the determinants. *Journal of the Association for Academic Minority Physicians* 2003;14(2/3):30-38.
[8] McCally M, Haines A, Fein O, Addington W, Lawrence RS, Cassel CK. Poverty and ill health: Physicians can, and should, make a difference. *Annals of Internal Medicine* 1998;129(9):726-733.
[9] Duncan GJ, Daly MC, McDonough P, Williams DR. Optimal indicators of socioeconomic status for health research. *American Journal of Public Health* 2002;92(7):1151-1157.
[10] Jones PJ. Levels of racism: A theoretic framework and a gardener's tale. *American Journal of Public Health* 2000:90(8):1212-1215.
[11] Byrd WM, Clayton LA. Racial and ethnic disparities in healthcare: A background and history. In Smedley BD, Stith AY, Nelson AR, Editors. (2003). *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare.* Washington, DC: The National Academies Press, p.482.
[12] Reducing Health Disparities Through a Focus on Communities: A Policy Link Report. November 2002.

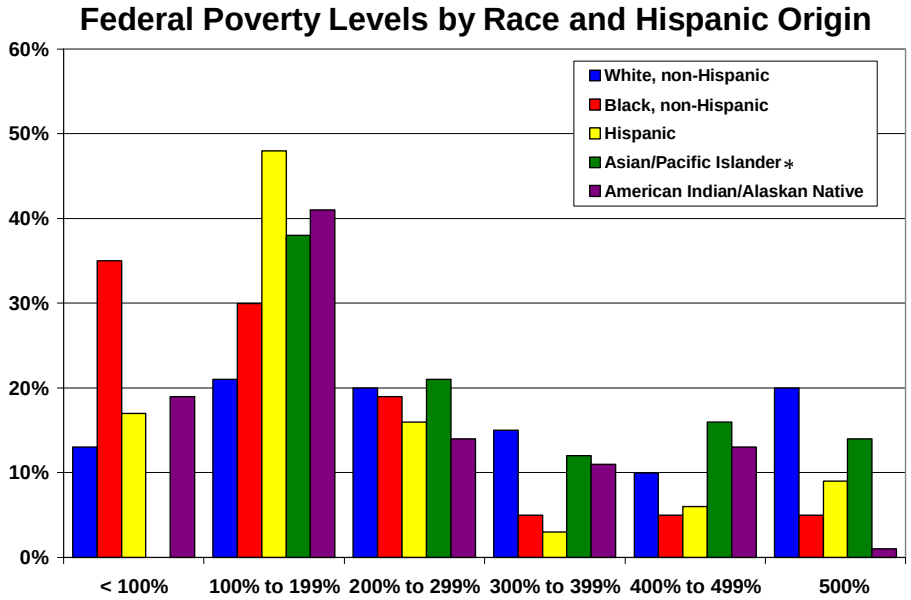
factors include poverty, racial and economic segregation, social and political organization, and social networks. The physical environment of a community (air; water; housing; transportation; and access to public, private and commercial services) may also directly or indirectly affect the health of its members.

The data sources for this section are Summary File 3 from Census 2000 and several years of the Current Population Survey (CPS), also from the US Bureau of the Census (**Appendix B**). The CPS data were obtained from the ACHI Multi-State Integrated Database. While there is an attempt to obtain a representative sample of the Arkansas population, this database contains small numbers of Hispanics and Asians that answered the survey, even after combining 3 consecutive years of responses. This limits the ability to interpret the data. When available data is shown for a population subgroup of small size in the survey, an asterisk (*) warns the reader to interpret cautiously.

Chart S-1

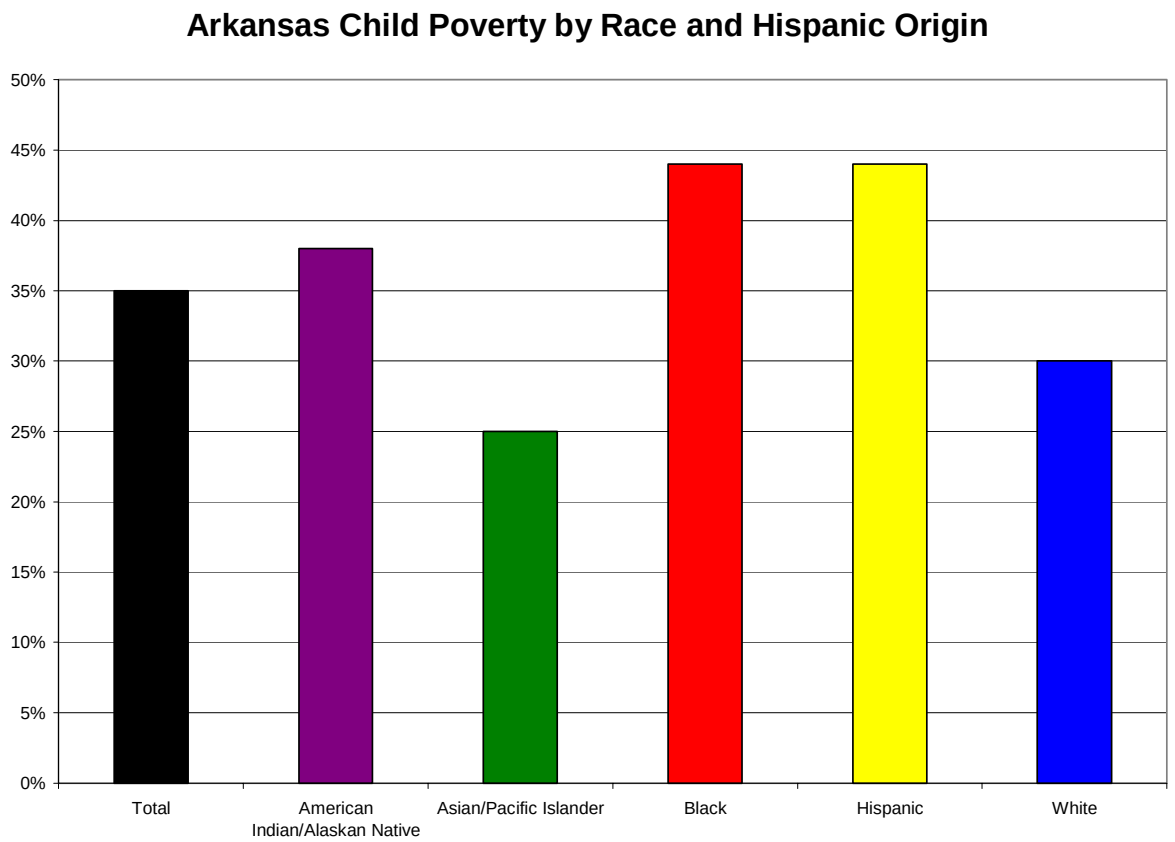
Arkansas Population by Federal Poverty Levels, Race and Hispanic Origin, 1999–2001

- Minority populations are concentrated at the lower end of the economic spectrum. In 2001, the poverty threshold for a family of four including 2 children was $17,960.
- 48% of Hispanics live between 100% and 199% of the federal poverty level (FPL); 34% of African Americans live below the FPL.
- Hispanic and African-American children are most likely to live in poverty.



Source: Current Population Survey, 1999-2001

** Estimates considered unreliable. These are based on less than 50 surveyed.*

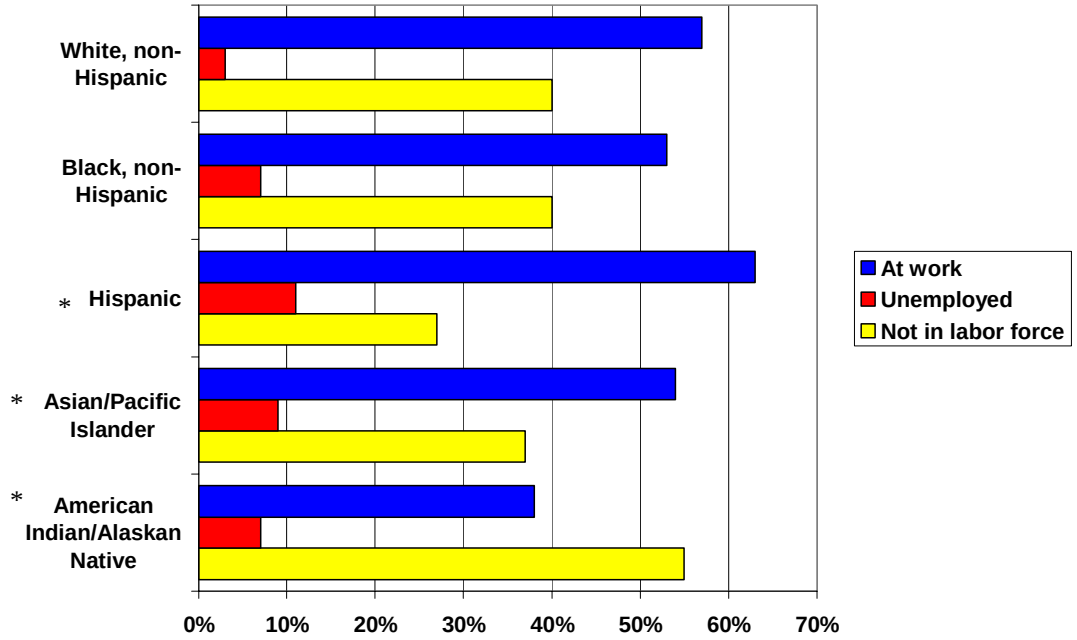


Source: U.S. Bureau of the Census, Census 2000, Summary File 3

Chart S-2

Employment Status by Race and Hispanic Origin, 1999–2001

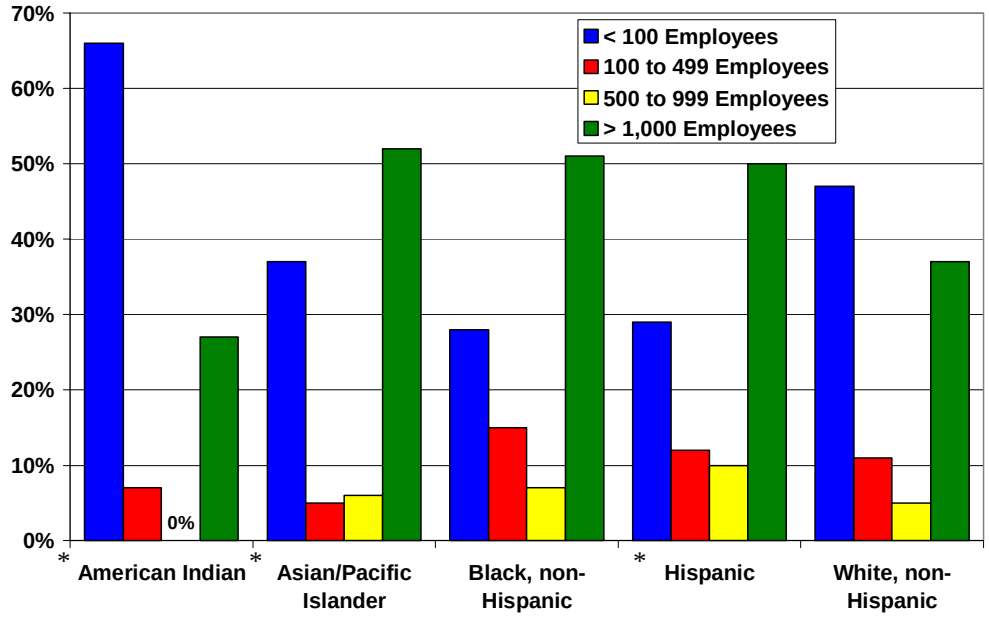
- Across most racial and ethnic groups, most people are “at work”.
- In this database, “not in the labor force” includes persons who are in the military, children, or retired.
- Minorities are more likely to be unemployed.
- 3% of Whites, 7% of Blacks, and 11% of Hispanics reported that they are unemployed.



Source: Current Population Survey 1999-2001

Chart S-3
Employer Size: Number of Employees, 1999-2001

- Whites and American Indians are more likely to work for employers with less than 100 employees.
- All other groups are more likely to work for employers with more than 1,000 employees.
- Employers with more than 1,000 employees are more likely to offer health insurance than smaller employers.

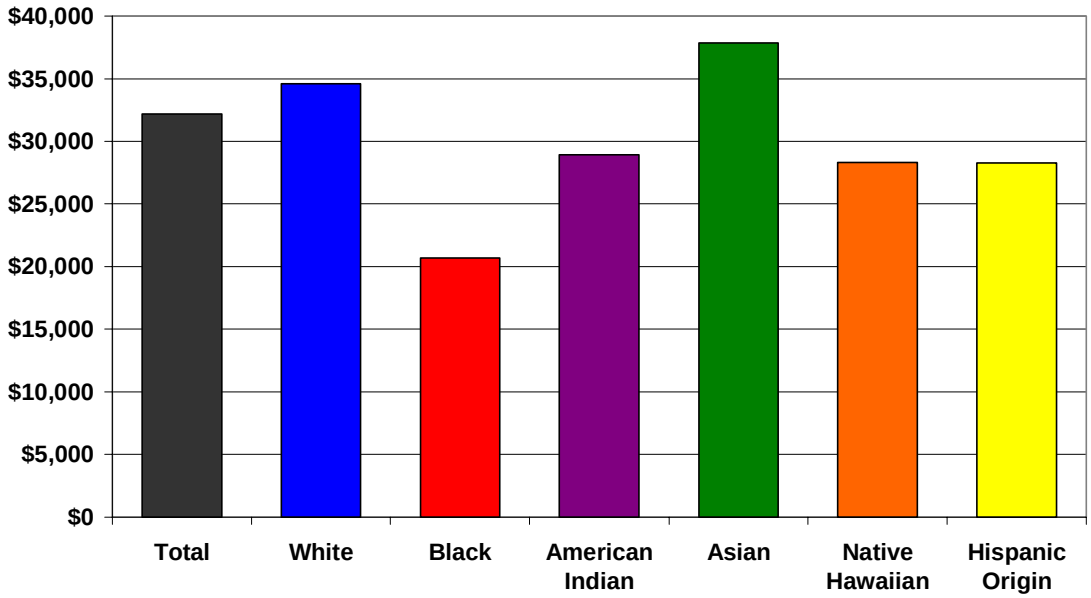


Sources: Current Population Survey 1999-2001 and Summary of the Arkansas Health Insurance Expansion Initiative 2001 Roundtable Report

Chart S-4

Median Household Income by Race and Hispanic Origin, 2000

- The US median household income was $41,994. Arkansas's median household income was $32,182.
- African-American households have the lowest median incomes in the state.
- Asian households have the highest median incomes.

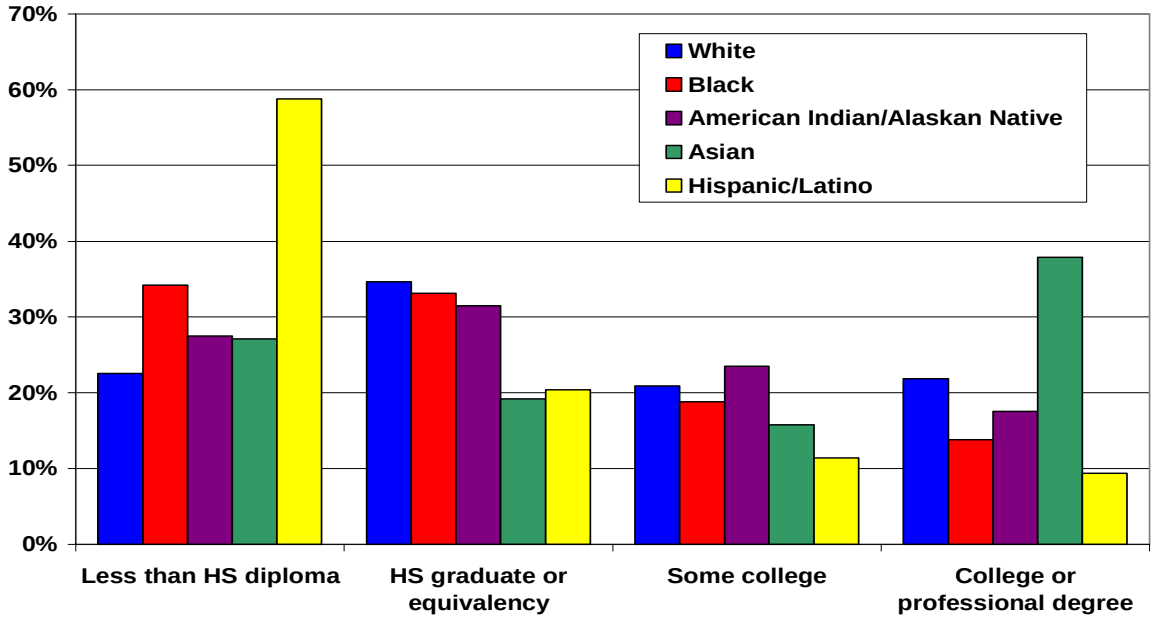


Source: U.S. Bureau of the Census, Census 2000, Summary File 3

Chart S-5

Educational Attainment for Persons 25 Years and Older, 2000

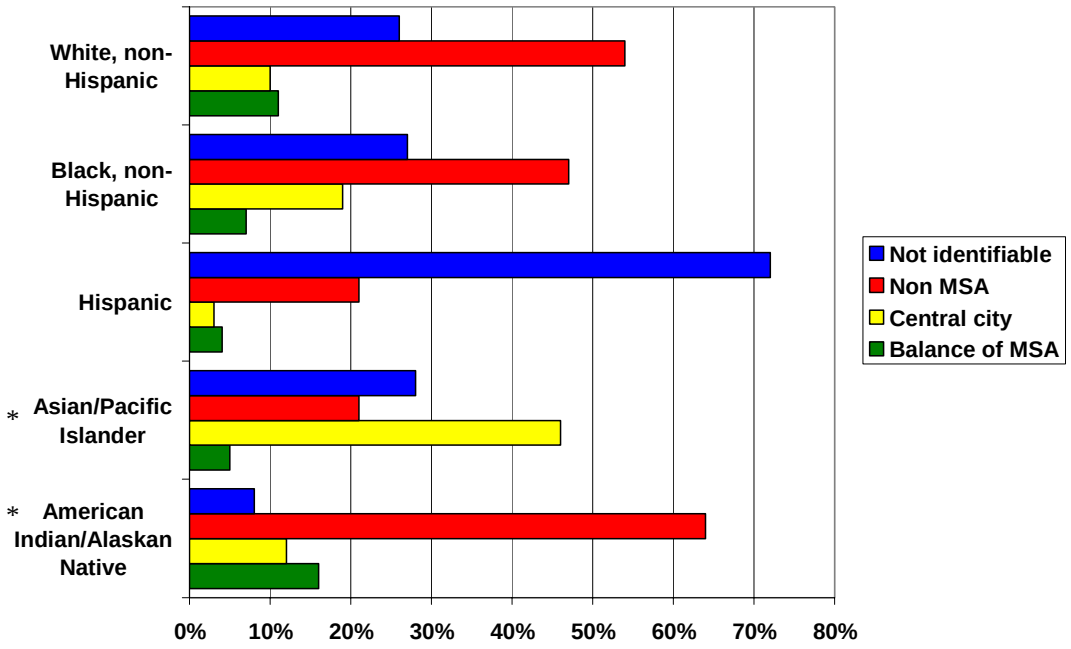
- Minorities are the least likely to finish high school.
- 35% of African Americans and 57% of Hispanics have less than a high school education; 33% of Whites are high school graduates or have equivalencies.
- Asians are the most likely to have a college or professional degree.



Source: U.S. Bureau of the Census, Census 2000, Summary File 3

Chart S-6
Urban vs. Rural Residence, 1999–2001

- 47.6% of the population lives in rural areas compared to 21% of the total US population.
- Although a large portion of the Hispanic population's status is "unidentifiable", it seems that most racial and ethnic groups live in rural areas.
- A majority of Asians live in the central city areas of the state.

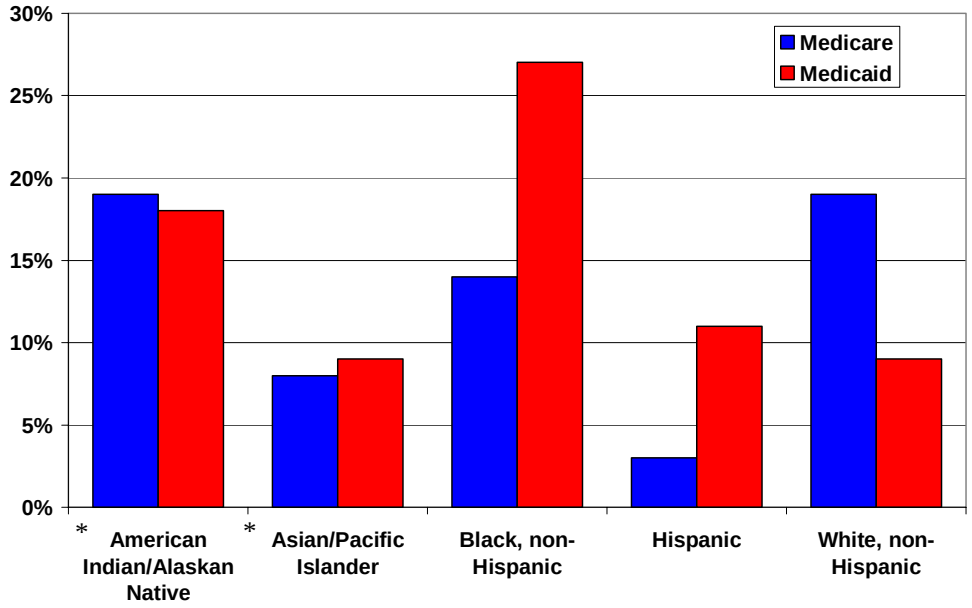


Source: Current Population Survey 1999-2001

Chart S-7

Medicare and Medicaid Coverage by Race and Hispanic Origin, 1999-2001

- Medicare coverage is a function of age, disability, or end-stage renal disease. Although only 8% of the African-American population is over age 65, 14% are covered by Medicare.
- 27% of the African-American population is covered by Medicaid, as compared to 11% of Hispanics and 18% of American Indians.



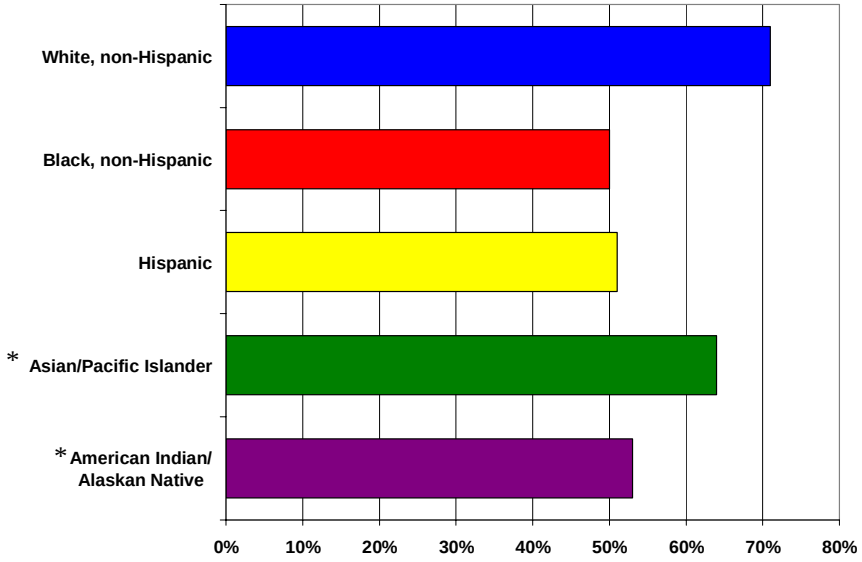
Source: Current Population Survey 1999-2001

Chart S-8

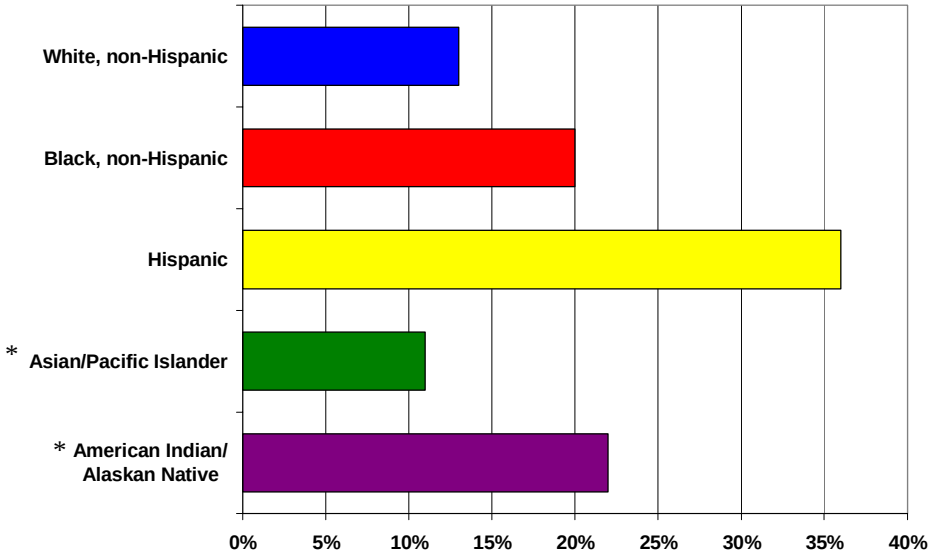
Private Health Insurance and Lack of Health Insurance by Race and Hispanic Origin, 1999-2001

- Private health insurance was reported by 71% of Whites and by approximately 50% of Hispanics, Blacks, and American Indians.
- 64% of Asians reported having private health insurance.
- More than one-third of Hispanics lacked health insurance, while one-fifth of African Americans were uninsured.

Private Insurance Coverage



Lack of Health Insurance

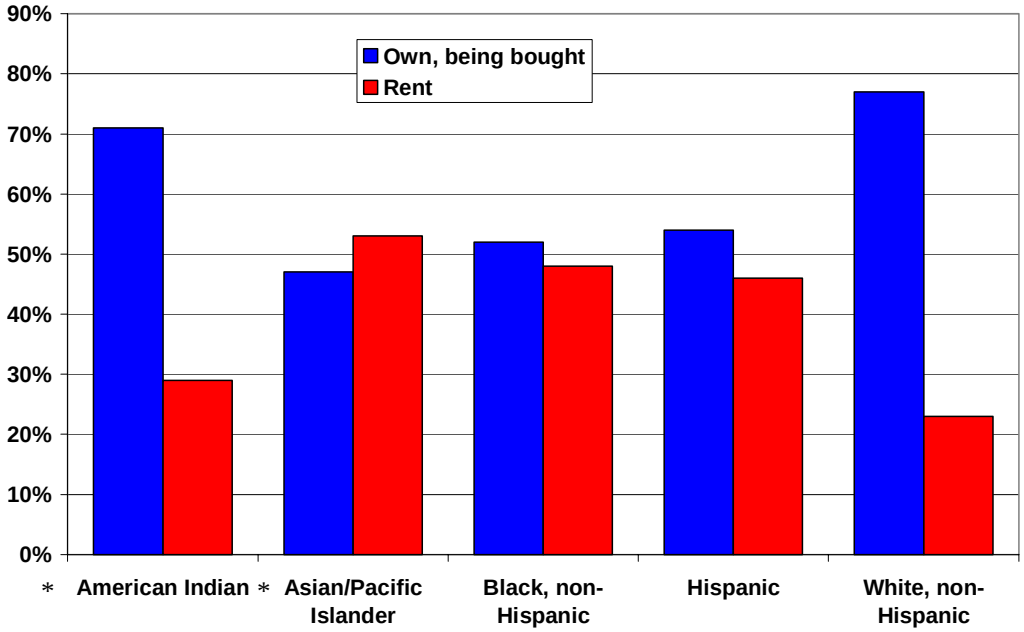


Source: Current Population Survey 1999-2001

Chart S-9

Housing Status by Race and Hispanic Origin, 1999-2001

- Most Whites and American Indians own a home.
- A majority of Asian/Pacific Islanders rent homes, and a majority of African Americans and Hispanics own homes.
- This survey did not attempt to measure the homeless population.

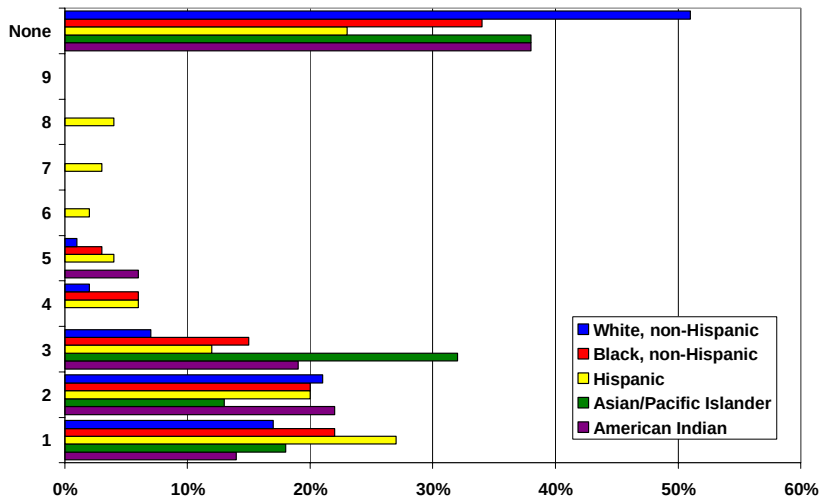


Source: Current Population Survey 1999-2001

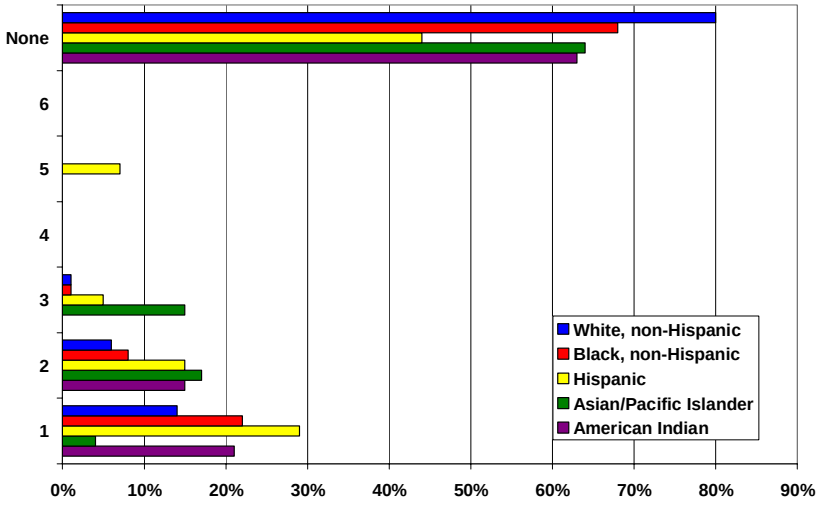
Chart S-10
Number of Children in Household, 1999-2001

- More than half of Whites have no children in the household.
- A majority of Hispanics have 2 or more children in the household.

Children Under 18 Years of Age



Children Under 6 Years of Age



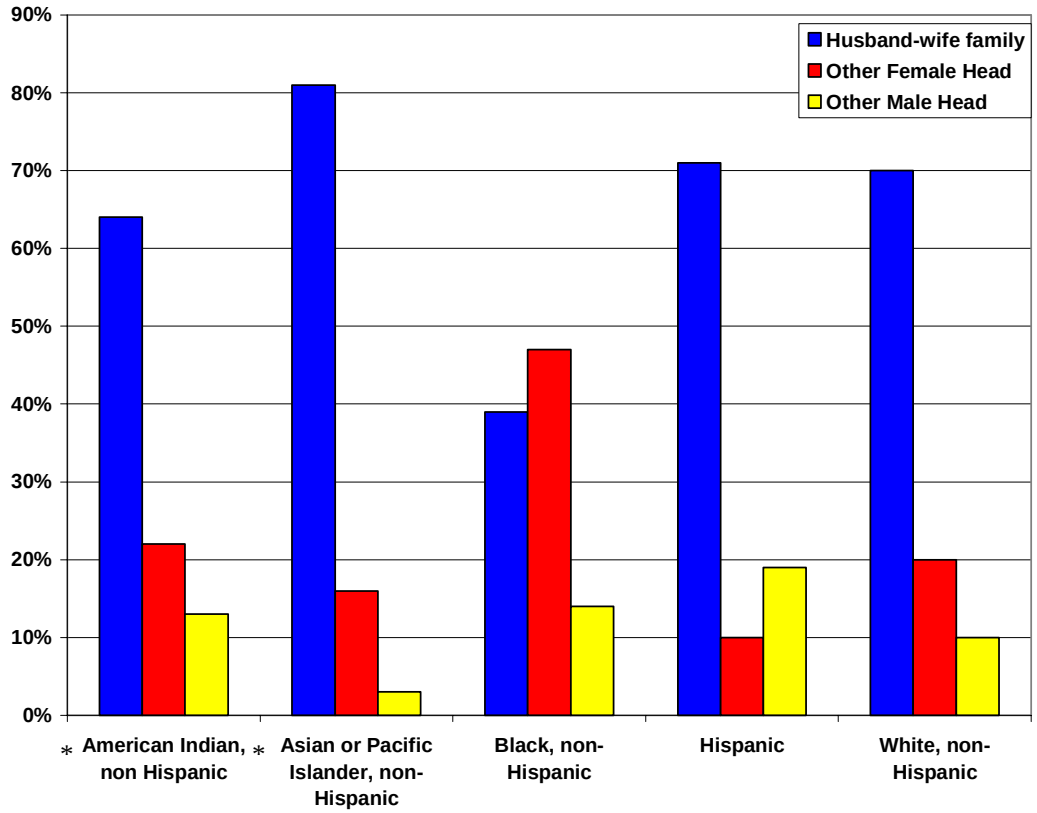
Source: Current Population Survey 1999-2001

** Hispanic, Asian/Pacific Islander and American Indian categories contain less than 50 respondents.*

Chart S-11

Family Type by Race and Hispanic Origin, 1999-2001

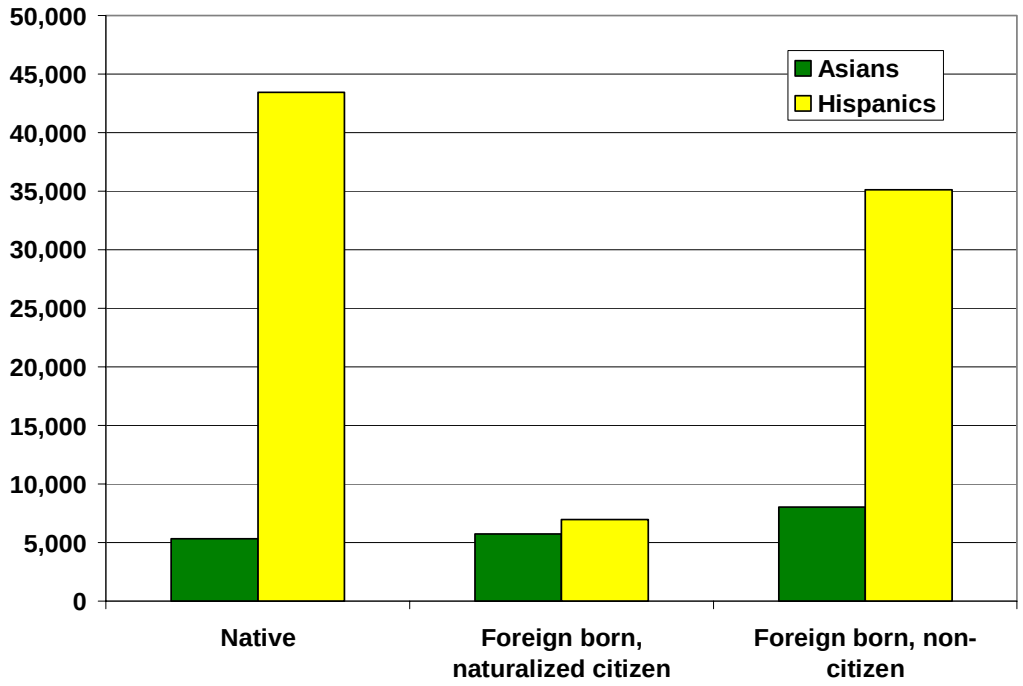
- Nearly half of African-American families are single-parent, with a female head of household.
- More than 60% of families in all other subgroups are of the husband–wife type.



Source: Current Population Survey, 1999-2001

Chart S-12
Asian and Hispanic Citizenship Status, 2000

- Over 43,000 of Arkansas's approximately 85,000 Hispanics were born in the US.
- 8,027 Asians (42%) are foreign-born, non-citizens.

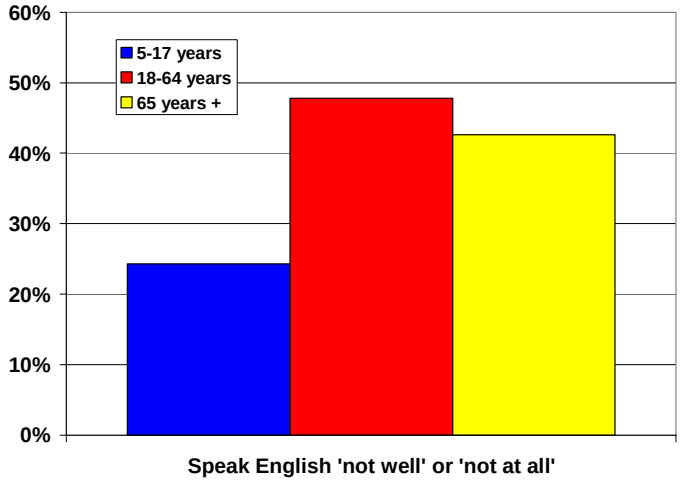


Source: U.S. Bureau of the Census, Census 2000, Summary File 3

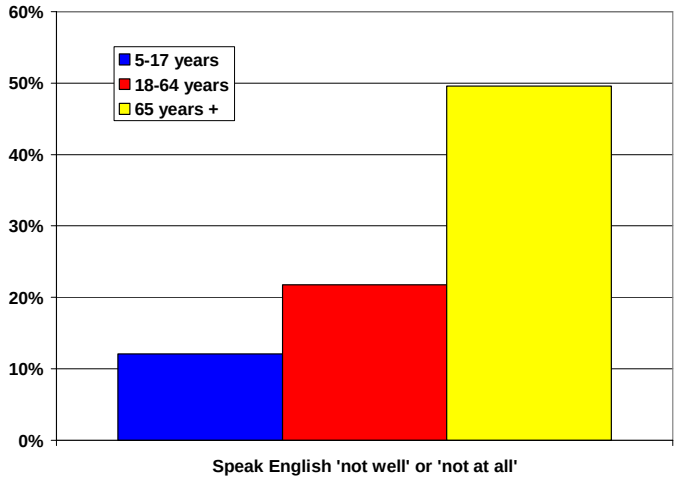
Chart S-13
English-Speaking Ability, 2000

- English proficiency varies among Asians and Hispanics.
- There is significant variation by age. Older Asians and Hispanics tend to speak English "not well" or "not at all".
- 47% of Hispanics ages 18–64 and 50% of Asians age 65 or over speak English "not well" or "not at all".

Hispanic/Latino Population



Asian Population



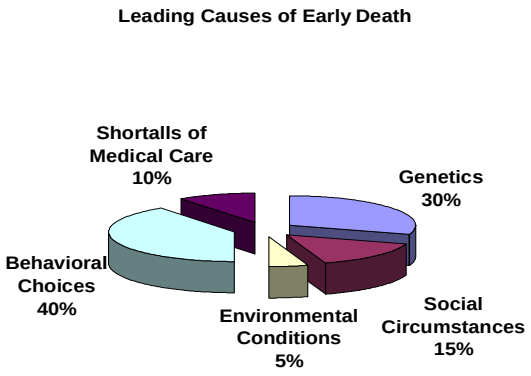
Source: U.S. Bureau of the Census, Census 2000, Summary File 3

HEALTH BEHAVIOR PROFILE

- **Chart HB-1: Self-Reported Health Status by Race and Hispanic Origin, 1999–2001**
- **Chart HB-2: Reporting Chronic Disease, 1999–2001**
- **Chart HB-3: "Could Not See a Doctor due to Cost", 1999–2001**
- **Chart HB-4: Hypertension, 1999–2001**
- **Chart HB-5: Consuming 5 or more Fruits/Vegetables per Day, 1999–2001**
- **Chart HB-6: Level of Physical Activity, 1999–2001**
- **Chart HB-7: Overweight or Obese, 1999–2001**
- **Chart HB-8: Smoking Status, 1999–2001**
- **Chart HB-9: "Days Physical Health Not Good", 1999–2001**
- **Chart HB-10: "Days Mental Health Not Good", 1999–2001**
- **Chart HB-11: Birth Rate per 1,000 Females Aged 15–19 Years, 1996–1998**

OVERVIEW

Health behaviors and other modifiable risk factors have a significant effect on individual and population health. Health behaviors do not occur in isolation. They occur in social, physical, and economic environments that make them more or less likely. These behaviors and risk factors are the basis for many chronic diseases that occur in Arkansas and the nation. In fact, social and behavioral factors (i.e., poverty, low educational attainment, unemployment, tobacco use, diet and physical inactivity) are thought to be responsible for a majority of deaths in the US. Lack of access to and quality of health services is thought to account for only about 10% of premature deaths.[13]



Despite the significance of social, behavioral, and environmental conditions, approximately 95% of the trillion dollars spent on healthcare in the US goes to direct medical care services, while just 5% is allocated to population-wide approaches to health improvement.[14]

Cigarette smoking, a common behavioral risk factor, increases the risk of lung cancer, heart disease, emphysema, and other respiratory diseases. Being overweight or obese increases the risk of diabetes, high blood pressure, stroke, and some cancers and is associated with 300,000 deaths in the US every year.[15] Smoking cessation, weight reduction and regular physical activity all lessen the risk of disease and enhance physical functioning.

When compared to the rest of the nation, Arkansans reported slightly increased percentages of being overweight or obese (60% vs. 57%), smoking some days or everyday (26% vs. 22%) and inability to see a doctor due to cost (13% vs. 10%). Arkansans report the same level of physical inactivity as the rest of the nation at 28%. As the following charts will show, minority and non-minority Arkansans generally report the same chronic disease

---

[13] J.M. McGinnis and WH Foege, " Actual Causes of Death in the United States," *Journal of the American Medical Association* 270, no.18 (1993):2207-2212.

[14] J.M. McGinnis, P. Williams-Russo and JR Knickman, "The Case for More Active Policy Attention to Health Promotion," Health Affairs Volume 21, number 2: 78-93.

[15] The Surgeon General's Call To Action To Prevent and Decrease Overweight and Obesity. Accessed at: http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_glance.htm.

burden and amount of days when not in good physical and mental health. In terms of behaviors, the consumption of fruits and vegetables is dwindling for all population groups, and few Arkansans engage in regular and vigorous physical activity.

However, more African Americans than Whites report they are in fair or poor health, were not able to see a doctor due to cost, have high blood pressure, and are overweight or obese. Some of these findings may be influenced by a lack of health insurance. Where possible, if lack of health insurance affects the data, there is an indication in the particular section.

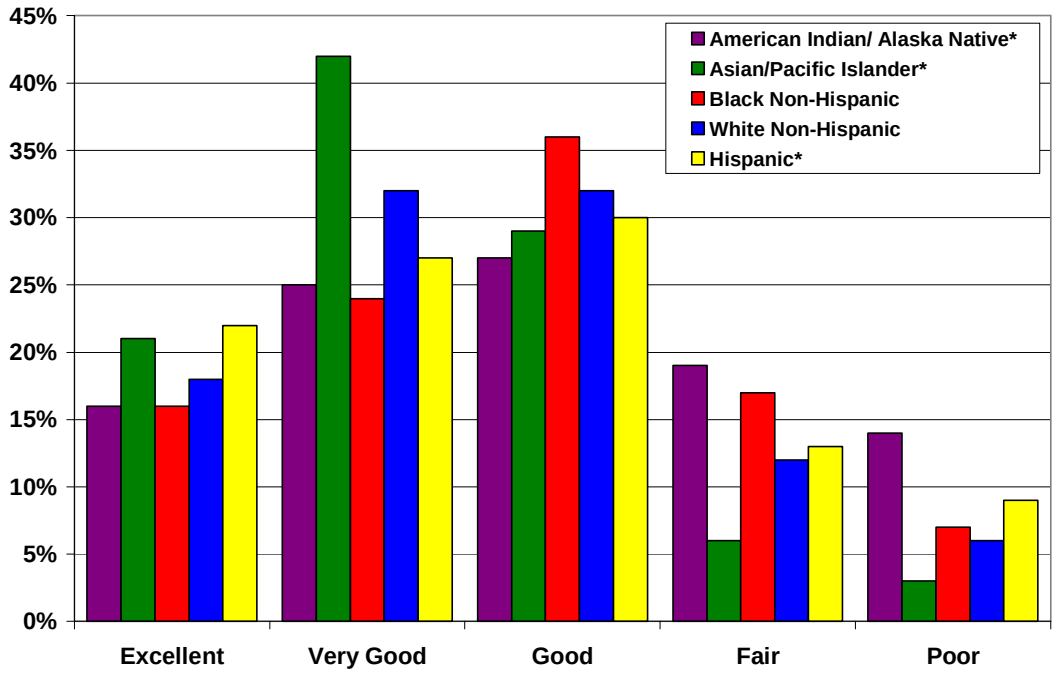
For the rare data that may be interpreted confidently for Hispanics, more than half of the population reports being overweight or obese and the birthrate for Hispanic teens is nearly double the rate for White teens.

The source of this information is the Behavioral Risk Factor Surveillance System (BRFSS; **Appendix B**). These data were also obtained from the ACHI Multi-State Integrated Database. The numbers of minorities surveyed each year is small and limits the interpretation of the data. Several years of data has been aggregated to increase the numbers of minority respondents. However, where there are less than 50 responses to a particular question, an asterisk (*) warns the reader to interpret cautiously.

Chart HB-1

Self-Reported Health Status, by Race and Hispanic Origin, 1999–2001

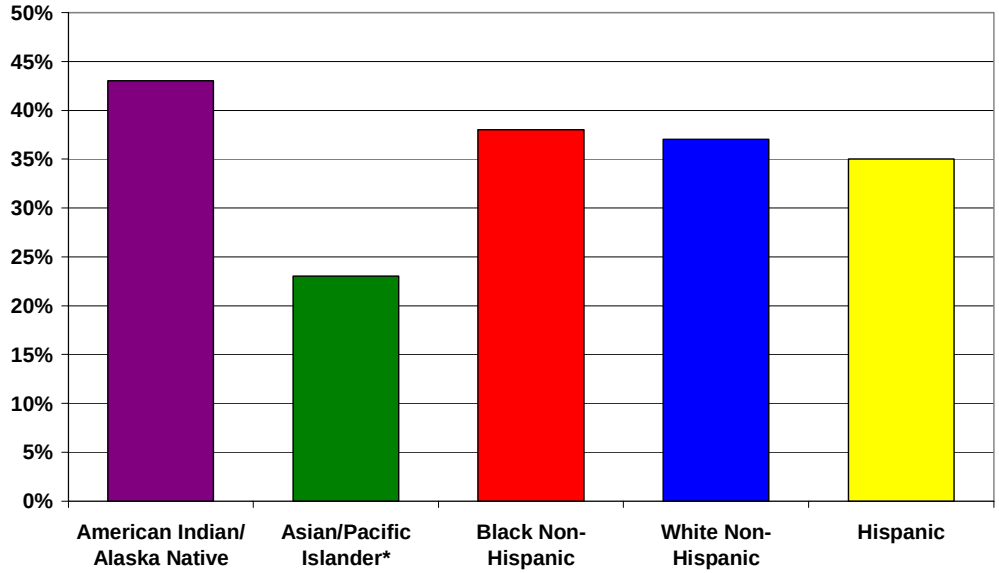
- 50% of Whites and 40% of African Americans report their health as “excellent” or “very good”.
- 18% of Whites and 25% of African Americans report their health as “fair” or “poor”.



Source: Multi-State Integrated Database, BRFSS
** Estimates considered unreliable. These are based on less than 50 surveyed.*

Chart HB-2
Reporting Chronic Disease, 1999–2001

- Chronic diseases are illnesses that are prolonged, do not resolve spontaneously, and are rarely cured completely.
- American Indians are the most likely to report a chronic disease.
- Over 35% of Whites and African Americans report a chronic disease. These numbers increase to 38% and 41% respectively, among those with health insurance.

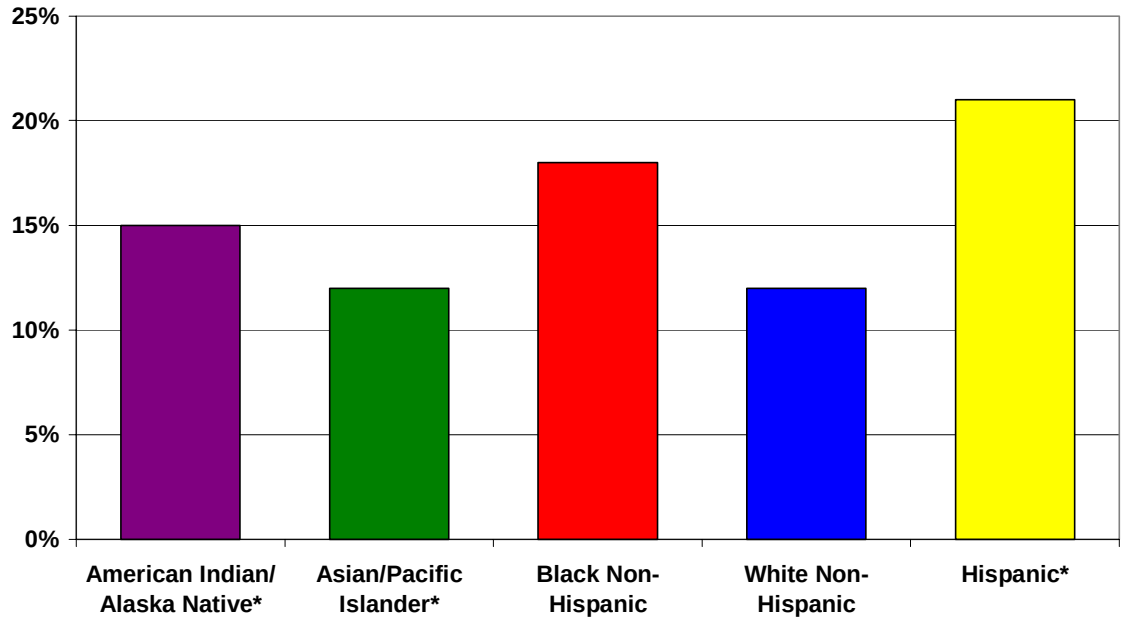


Source: Multi-State Integrated Database, BRFSS
** Estimates considered unreliable. These are based on less than 50 surveyed.*

Chart HB-3

"Could Not See a Doctor due to Cost" 1999–2001

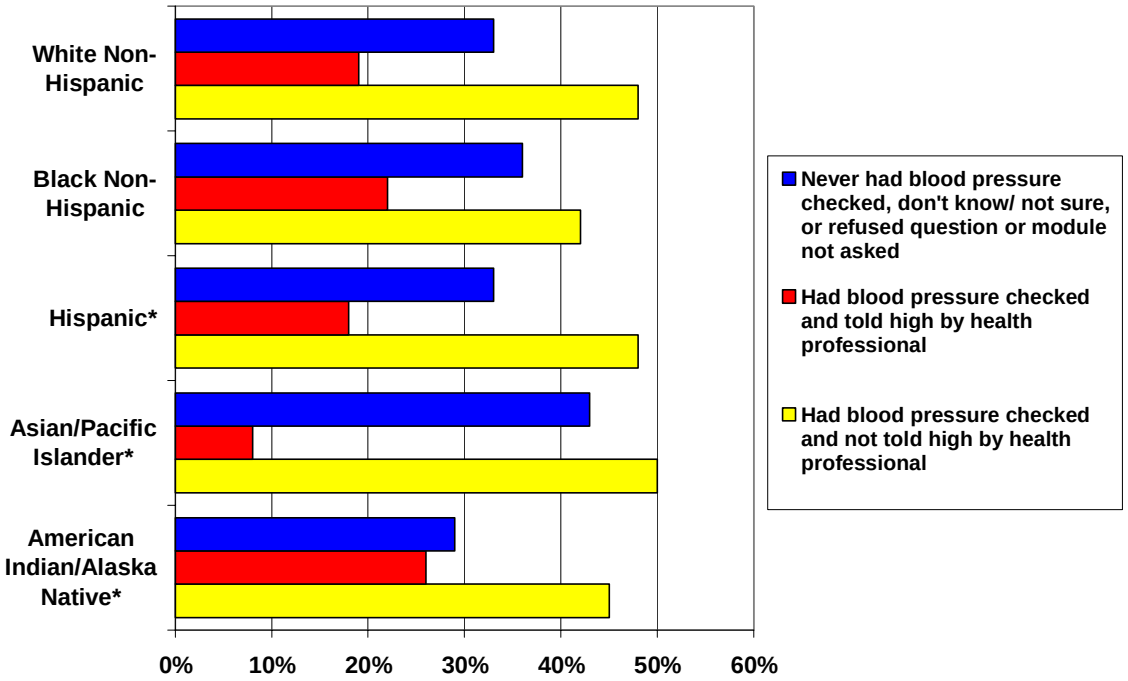
- 18% of African Americans report not seeing a doctor due to cost.
- Even with access to health insurance, African Americans remain more likely than Whites to not see a doctor for financial reasons (11% vs. 7%).



Source: Multi-State Integrated Database, BRFSS
** Estimates considered unreliable. These are based on less than 50 surveyed.*

Chart HB-4
Hypertension, 1999–2001

- Over 1/3 of Whites and African Americans have never had their blood pressure checked or were unsure. Among those with health insurance 36% of African Americans and 33% of whites never had a blood pressure checked or were unsure.
- African Americans are more likely than Whites to have high blood pressure.

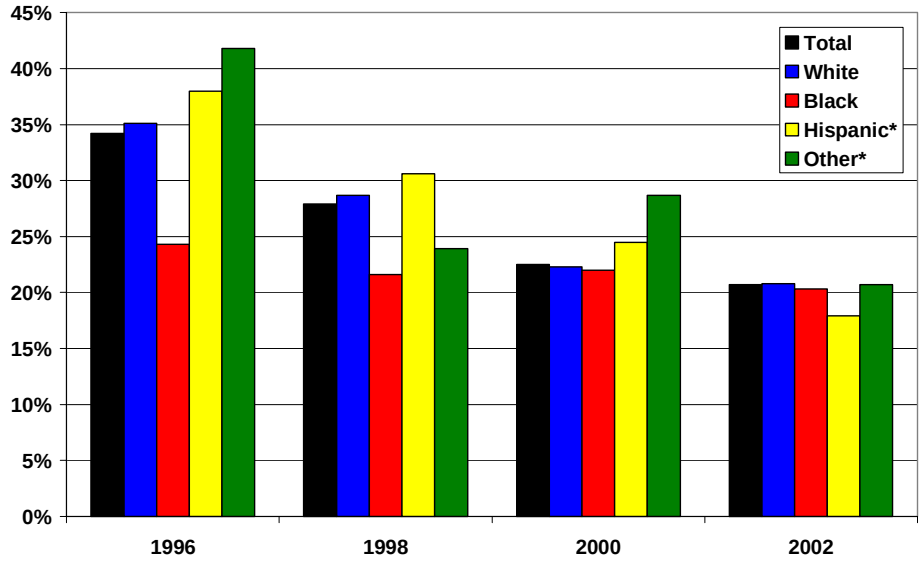


Source: Multi-State Integrated Database, BRFSS
** Estimates considered unreliable. These are based on less than 50 surveyed.*

Chart HB-5

Consuming 5 or more Fruits/Vegetables per Day, 1996–2002

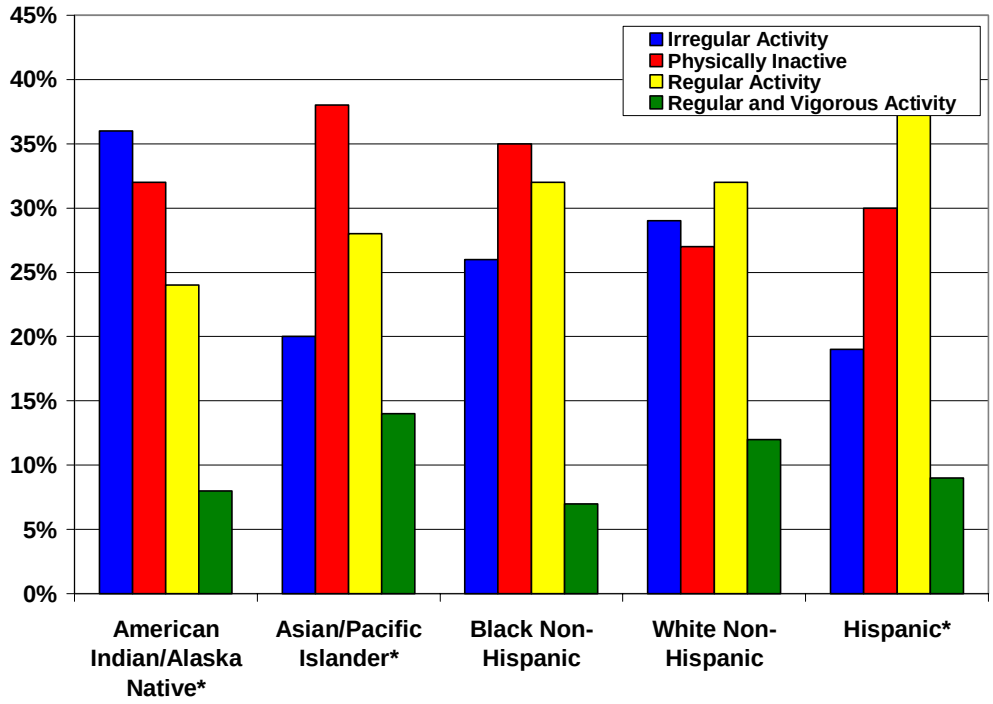
- The intake of fruits and vegetables has been declining since 1996.
- The proportion of the population that eats the recommended amount of fruits and vegetables a day has declined from 1 in 3 to 1 in 5 over 6 years.
- There is little difference by race.



Source: BRFSS, http://www.cdc.gov/brfss/index.htm.
** Estimates considered unreliable. These are based on less than 50 surveyed.*

Chart HB-6
Level of Physical Activity, 1999–2001

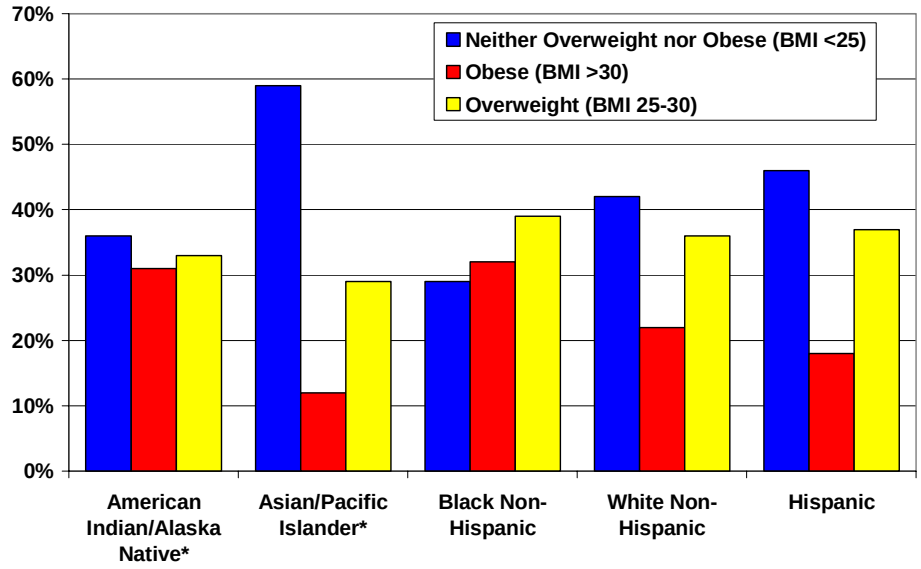
- Most Arkansans do not participate in regular, vigorous activity.
- 7% of Blacks and 12% of Whites report regular and vigorous activity.
- More Blacks than Whites report they are physically inactive.



Source: Multi-State Integrated Database, BRFSS
** Estimates considered unreliable. These are based on less than 50 surveyed.*

Chart HB-7
Overweight or Obese, 1999–2001

- The BMI, or body mass index, is a number that measures body weight adjusted for height.[16]
- African Americans are most likely to report being overweight or obese.
- 71% of African Americans, 58% of Whites, and 55% of Hispanics report they are overweight or obese.

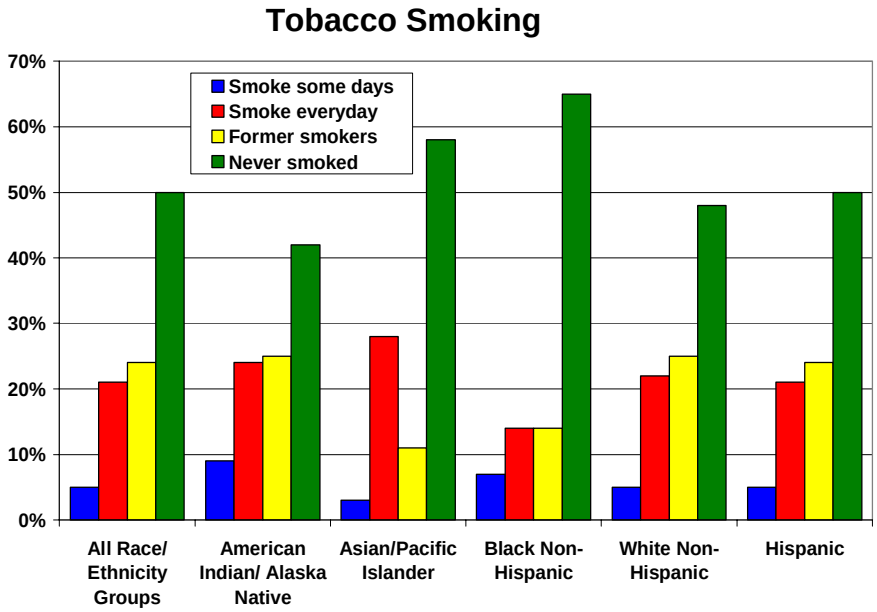


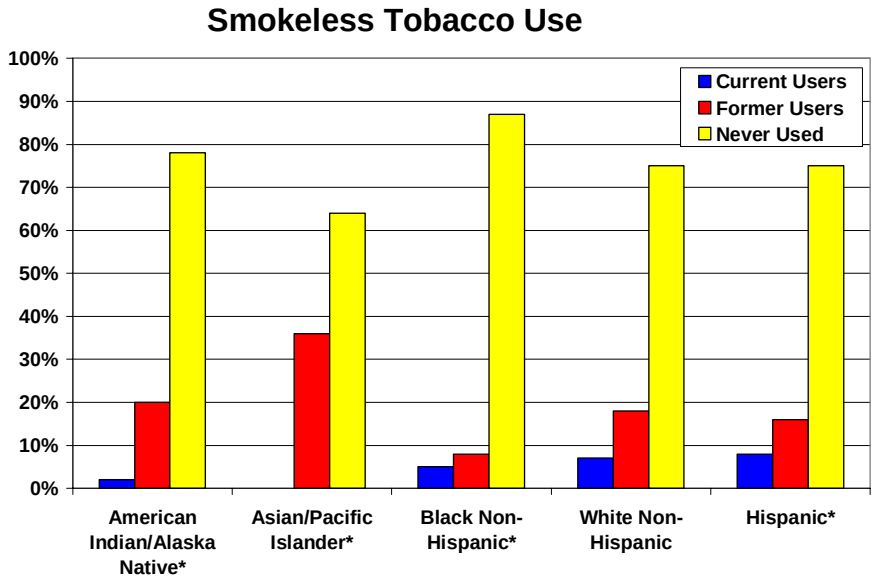
Source: Multi-State Integrated Database, BRFSS
** Estimates considered unreliable. These are based on less than 50 surveyed.*

[16] For further information about BMI, including a calculator for metric and English units, see http://www.cdc.gov/nccdphp/dnpa/bmi/calc-bmi.htm.

Chart HB-8
Smoking Status, 1999–2001

- 21% of Arkansans smoke everyday.
- 21 % of Blacks smoke some days or everyday, while 27% of Whites smoke some days or everyday.
- 7 % of Whites use smokeless tobacco.



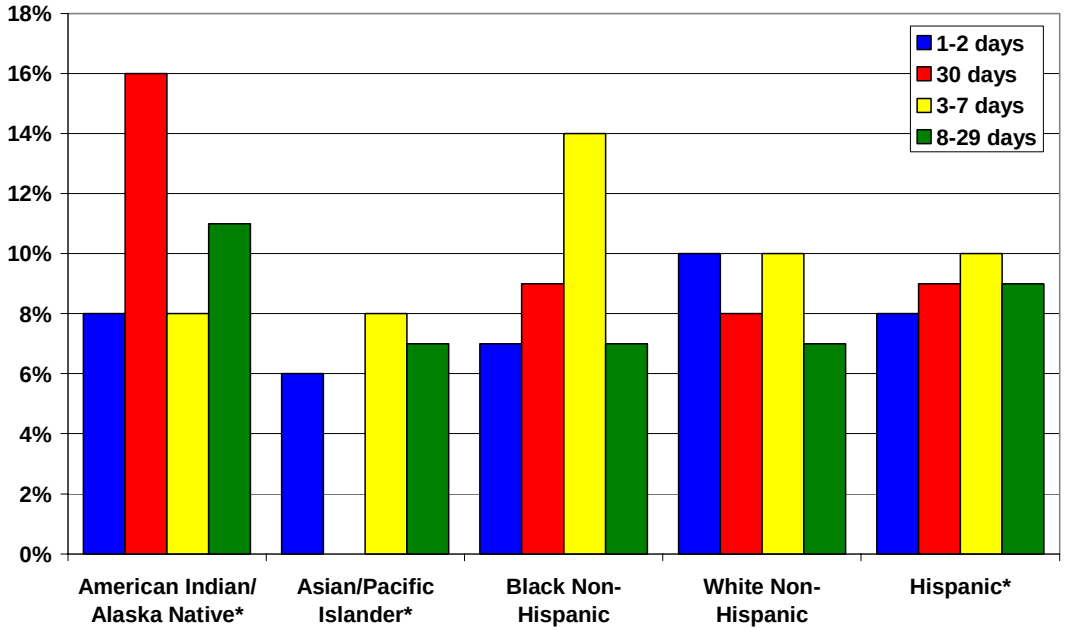


Source: Multi-State Integrated Database, BRFSS
** Estimates considered unreliable. These are based on less than 50 surveyed.*

Chart HB-9

"Days Physical Health Not Good" in the Last Month, 1999–2001

- Nearly equal proportions of African Americans and Whites reported they were not in good physical health for 1 week or less.
- Nearly equal proportions of African Americans and Whites reported they were not in good physical health for 8–30 days.

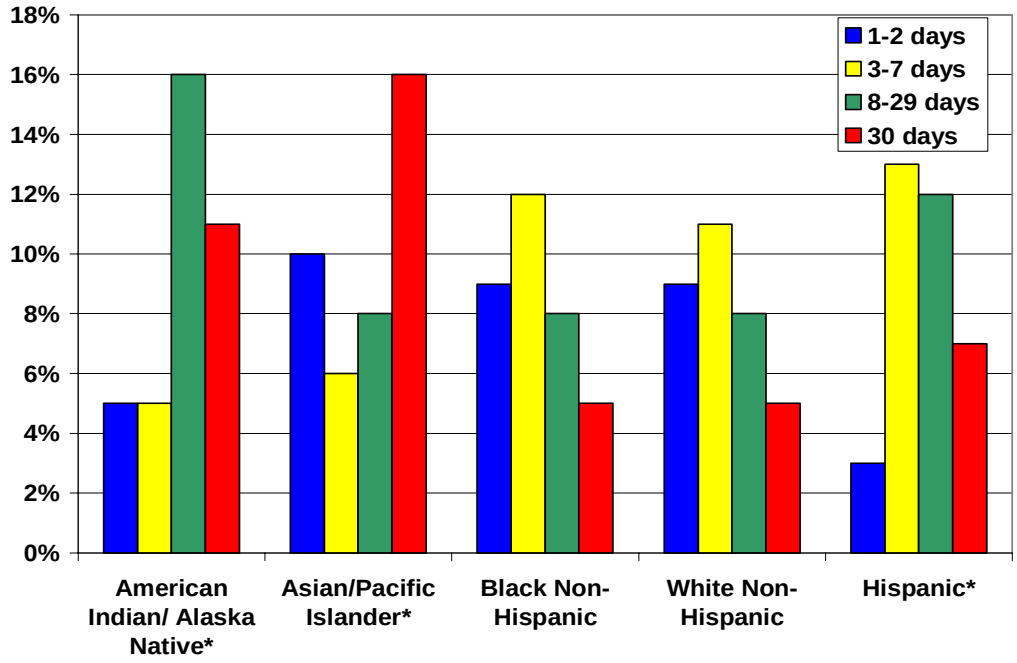


Source: Multi-State Integrated Database, BRFSS
** Estimates considered unreliable. These are based on less than 50 surveyed.*

Chart HB-10

"Days Mental Health Not Good" in the Last Month, 1999–2001

- National data suggest that the prevalence of mental disorders in racial and ethnic minorities is similar to that of Whites. However, minorities have a greater disability burden due to less care and poorer quality of mental health care.[17]
- The distribution of reported days not in good mental health is nearly equal among Whites and African Americans.

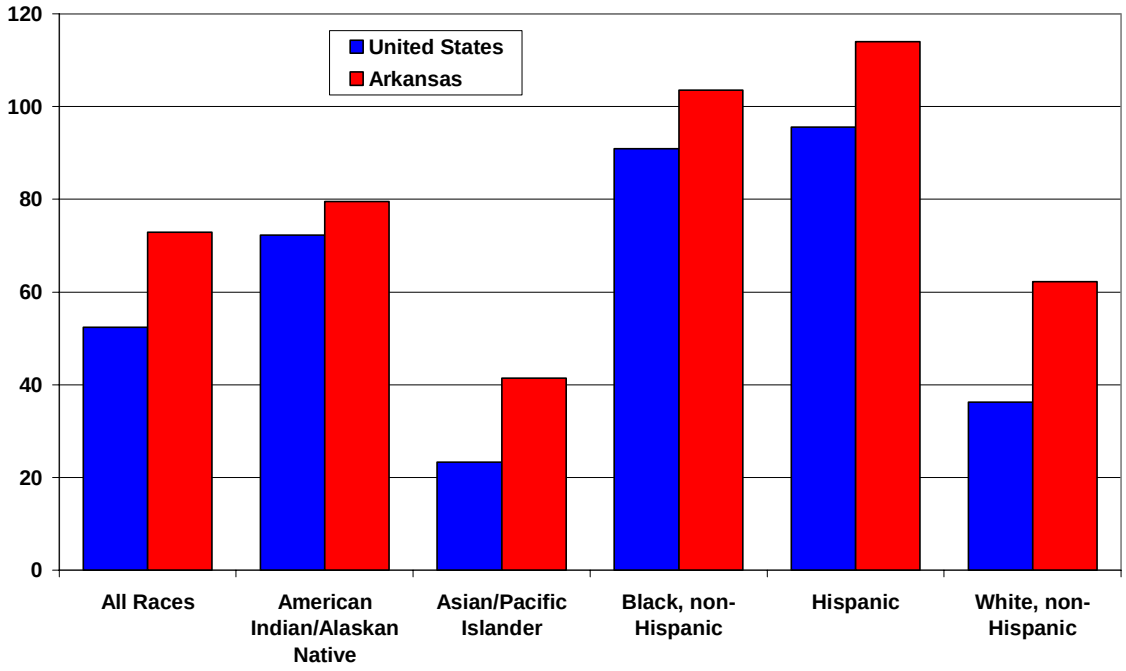


[17] U.S. Department of Health and Human Services. (2001) Mental Health: Culture, Race, and Ethnicity- A Supplement to Mental Health: A Report of the Surgeon General. Rockville, MD: US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services. *Source of chart: Multi-State Integrated Database, BRFSS. *Estimates considered unreliable. These are based on less than 50 surveyed.*

Chart HB-11

Birth Rate per 1,000 Females Aged 15–19 Years, 1996–1998

- The teenage birthrate for Arkansas is 39% higher than the national rate.
- White teens have birthrates 72% higher than the national rate.
- Hispanic and African American teens have birthrates 83% and 66% higher, respectively, than White teens.



Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, Birth file.

MINORITY HEALTH PROFILE

- **Section MH-1: Infant Mortality**
- **Section MH-2: Low Birthweight Infants**
- **Section MH-3: Heart Disease and Ischemic Heart Disease**
- **Section MH-4: All Cancers**
- **Section MH-5: Lung Cancer**
- **Section MH-6: Colorectal Cancer**
- **Section MH-7: Breast Cancer**
- **Section MH-8: Cervical Cancer**
- **Section MH-9: Prostate Cancer**
- **Section MH-10: Cerebrovascular Disease (Stroke)**
- **Section MH-11: Accidental Death and Motor Vehicle Accidents**
- **Section MH-12: Diabetes**
- **Section MH-13: Asthma**
- **Section MH-14: HIV/AIDS**
- **Section MH-15: Homicide**

OVERVIEW

During the last 100 years, the health of the nation has greatly improved. Through public health measures, control of infectious diseases, and advances in medical treatment the length and quality of life of many Americans has increased. Chronic diseases such as high blood pressure, diabetes, and heart disease now cause most of the nation's sickness and death.

Life expectancy (the average number of years of life expected if current death rates were to remain constant) and infant mortality (the risk of death during the first year of life) are two important measures of a population's health. Life expectancy at birth in 1900 was 47.3 years (47.9 years for males and 50.7 years for females) but by 2000 had increased to 76.9 years (74.8 years for males and 80 years for females)[18]. However, for African Americans, the life expectancy for males was 7 years less, and for females it was 5 years less. For one subset of Hispanics, the farm worker, life expectancy is only 49 years.[19]

With respect to infant mortality, the rate has decreased from 29.2 per 1,000 live births in 1950 to 6.8 per 1,000 births in 2001. However, the infant mortality rate for African Americans is 2 times that of Whites at 13.3 per 1,000. Hispanic children have a mortality rate that is lower than the national rate at 5.7 per 1,000, while the American Indian/Alaska Native rate is 9.0 per 1,000, and Asian infant mortality is 5.1 per 1,000.

Overall, there were 2,416,425 deaths in the US in 2001. The major causes of death are shown in the following table 3. The causes of death for minority populations mirror those for the country as a whole with some variation. Minorities in the nation have higher death rates for most of the chronic diseases, including heart disease, cancer, and stroke. While the leading causes of death are similar, diabetes, unintentional injuries, homicide, and HIV/AIDS are a disproportionate problem in minority populations, specifically for African Americans, American Indians, and Hispanics.

[18] Freid VM, Prager K, MacKay AP, Xia H. Chartbook on Trends in the Health of Americans. Health, United States, 2003. Hyattsville, Maryland: National Center for Health Statistics. 2003.

[19] Byrd WM, Clayton LA. Racial and ethnic disparities in healthcare: A background and history. In Smedley BD, Stith AY, Nelson AR, Editors. (2003). *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare.* Washington, DC: The National Academies Press, p.481.

White	African American	American Indian/Alaska Native	Asian/Pacific Islander	Hispanic/Latino
Diseases of the Heart	Diseases of the Heart	Diseases of the Heart	Cancer	Diseases of the Heart
Cancer	Cancer	Cancer	Diseases of the Heart	Cancer
Stroke	Stroke	Unintentional Injuries	Stroke	Unintentional Injuries
Chronic Lower Respiratory Disease	Unintentional Injuries	Diabetes	Unintentional Injuries	Stroke
Unintentional Injuries	Diabetes	Stroke	Diabetes	Diabetes
Diabetes	Homicide	Chronic Liver Disease	Chronic Lower Respiratory Disease	Homicide
Influenza/Pneumonia	HIV Disease	Chronic Lower Respiratory Disease	Influenza/Pneumonia	Chronic Liver Disease
Alzheimer's Disease	Chronic Lower Respiratory Disease	Suicide	Suicide	Chronic Lower Respiratory Disease
Kidney Diseases	Kidney Diseases	Influenza/Pneumonia	Kidney Diseases	Influenza/Pneumonia
Suicide	Septicemia	Kidney Diseases	Homicide	Perinatal Conditions

Table 3: US Major Causes of Death, 2001

Source: National Center for Health Statistics: http://www.cdc.gov/nchs/hus.htm

ARKANSAS

The health of Arkansans is poorer than that of the rest of the nation. The state has consistently ranked near the bottom of most health indicators. In 2003, Arkansas had an overall health score that was 47th out of 50 in the nation. This score was based on a combination of measures including prevalence of smoking, poverty, lack of health insurance, and measures of death and disease.[20] The age-adjusted mortality rate of Arkansans was 11% higher than the rest of the nation from 1999–2001.[21] However, this number hides the true impact of poor health on minority communities. The all-cause age-adjusted mortality rate during the same period for African-American Arkansans was 40% higher than the national all-cause age-adjusted mortality rate. State level mortality rates for other racial and ethnic minorities in Arkansas were either not available or unreliable due to small numbers. Therefore, this section will only report Black/White differences in age-adjusted mortality.

[20] United Health Foundation, America's Health: State Health Rankings 2003 Edition. http://www.unitedhealthfoundation.org/shr2003/.

[21] Health , United States, 2003, Table 28

In 2000, there were 28,182 deaths reported by the Arkansas Department of Health. The leading causes of death were as follows:

1. Heart Disease
2. Cancer
3. Stroke (Cardiovascular Disease)
4. Chronic Lower Respiratory Diseases
5. Accidents
6. Influenza and Pneumonia
7. Diabetes
8. Kidney Diseases
9. Septicemia
10. Alzheimer Disease

The 10 leading causes of death for the "non-White population" reflects the total population with the exception of an increased burden of accidents, diabetes, kidney disease, and assault.[22]

Data from the period of 1990–2000 reveal that the African-American age-adjusted death rate from all causes of death was 31% higher than the White population. This disparity has been relatively constant over the time period examined (**Figure 2**).

Mortality rates increase as one's age increases. Men have higher mortality rates than women. Throughout most of the lifespan, the age-adjusted death rates for African-American males and females are higher than for Whites (**Figure 3**).

Figure 2: Arkansas All Cause Mortality by Race 1990-2000

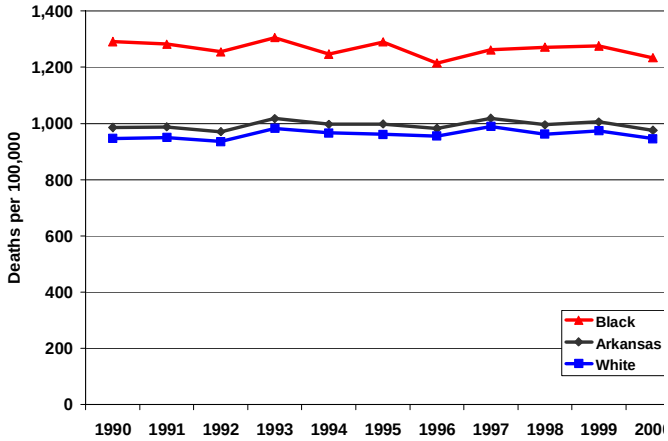
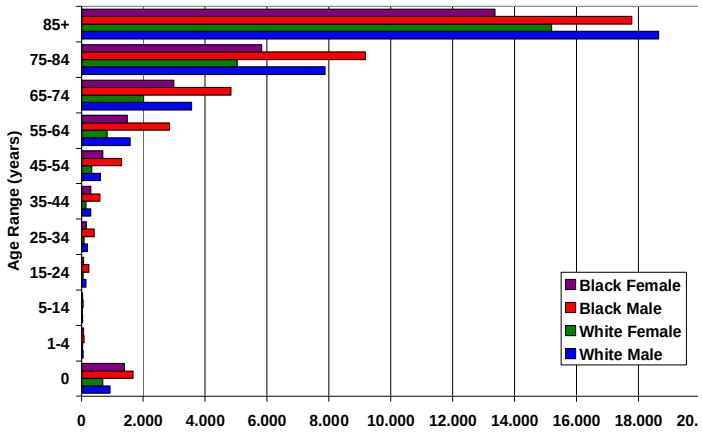


Figure 3: All Cause Mortality, Arkansas 1990-2000 by Age, Race and Sex



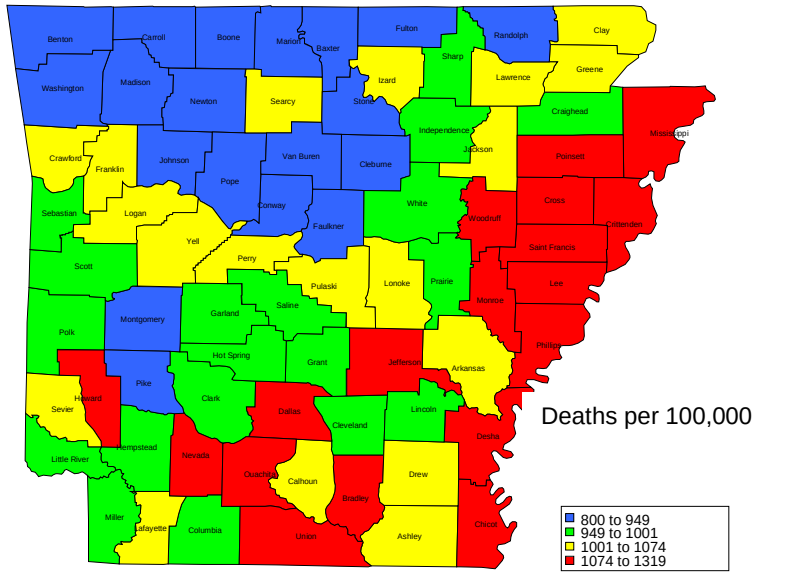
[22] Arkansas Department of Health, Vital Statistics

Examining mortality rates by county provides additional information to describe minority health. The counties with the highest age-adjusted mortality rates are along the eastern border and are a third or more African American (**Figure 4**). The counties with the highest all-cause age-adjusted death rates are: Phillips (1,315/100,000), Mississippi (1,214/100,000), and Crittenden (1,210/100,000) in the Northeast and Southeast Public Health Regions.

The graphs and maps in this section give an overview of minority health with respect to the leading causes of death and those conditions that are of greater burden on minority communities. Each section begins by stating the most current national estimates of mortality. Arkansas-specific data, by race and sex, from 1990-2000 is then presented to show disparities between Blacks and Whites. Hospital discharge data is presented to appreciate the economic impact of each disease. Finally, there is a geographic representation of the counties with the highest mortality rates. These mortality rates are for all residents in the county irrespective of race. The counties have been divided into equal groups. The counties in the top 25% indicate higher mortality rates and are in red, followed by yellow and green. The counties in the lowest quartile are in blue.

The purpose of this section is to better understand the current state of health and the magnitude of health disparities. With this understanding, steps to eliminate disparities can be taken, including developing policies, targeting resources to the areas of greatest need, and generating further questions to be answered.

Figure 4: All-Cause Age-Adjusted Deaths by County, 1990-2000



State Average 994/100,000

Section MH-1
Infant Mortality by Race and Hispanic Origin

Infant mortality rates are the most commonly used index for measuring the risk of dying during the first year of life. Infant mortality rates use the number of live births to approximate the population at risk of dying before the first birthday.

In the US, there have been substantial reductions in infant mortality. However, Black–White differences in the infant mortality rates persist. The leading causes of infant deaths before one year of age include birth defects, low birthweight, and sudden infant death syndrome (SIDS), which together accounted for 44% (27,500) of all infant deaths in 2001.[23] The national infant mortality rate was 6.8 per 1,000 live births in 2001. The rate for the White population was 5.7/1,000, while the Black infant mortality rate was 13.3/1,000.[24]

In Arkansas in 2001, there were 309 infant deaths. The infant mortality rate in 2001 was 8.3/1,000 live births or 22% higher than the national figure (**Figure 1**). Consistent with the national trends, Arkansas has significant differences in infant mortality by race (**Figure 2**). From 1999 to 2001, the death rate for Black children was 12.2/1,000, while the rate for White children was 7.5/1,000. The Hispanic population had a lower infant mortality rate at 4.2/1,000. The counties with the highest infant mortality rates are in the Southeast Public Health Region (**Figure 3**).

[23] National Center for Health Statistics (NCHS), 2003
[24] National Vital Statistics Reports, Vol.52, No. 3, September 18, 2003.

Figure 1: All Infant Mortality Rates per 1,000 Live Births

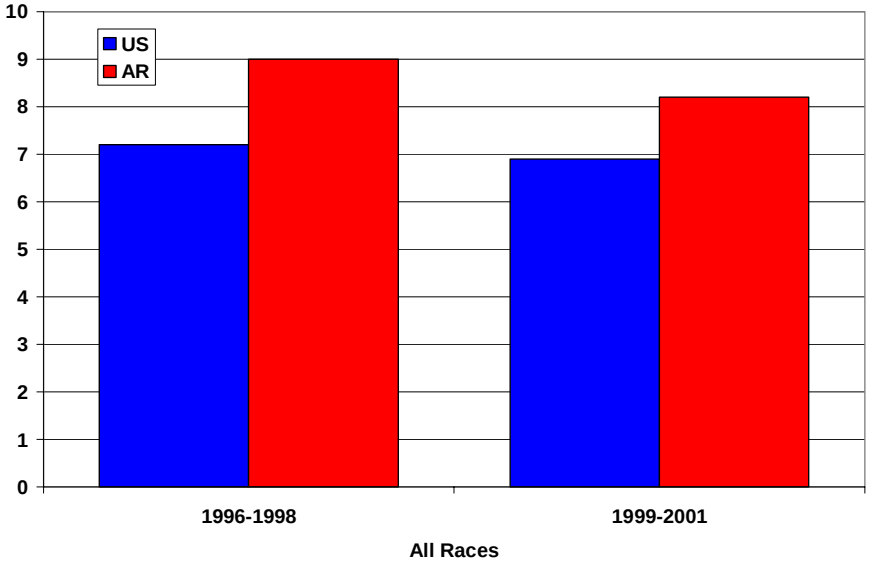
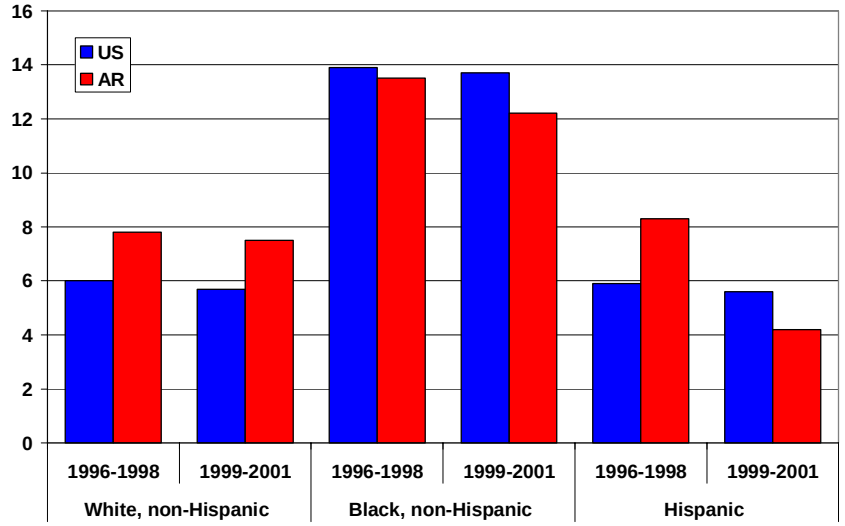
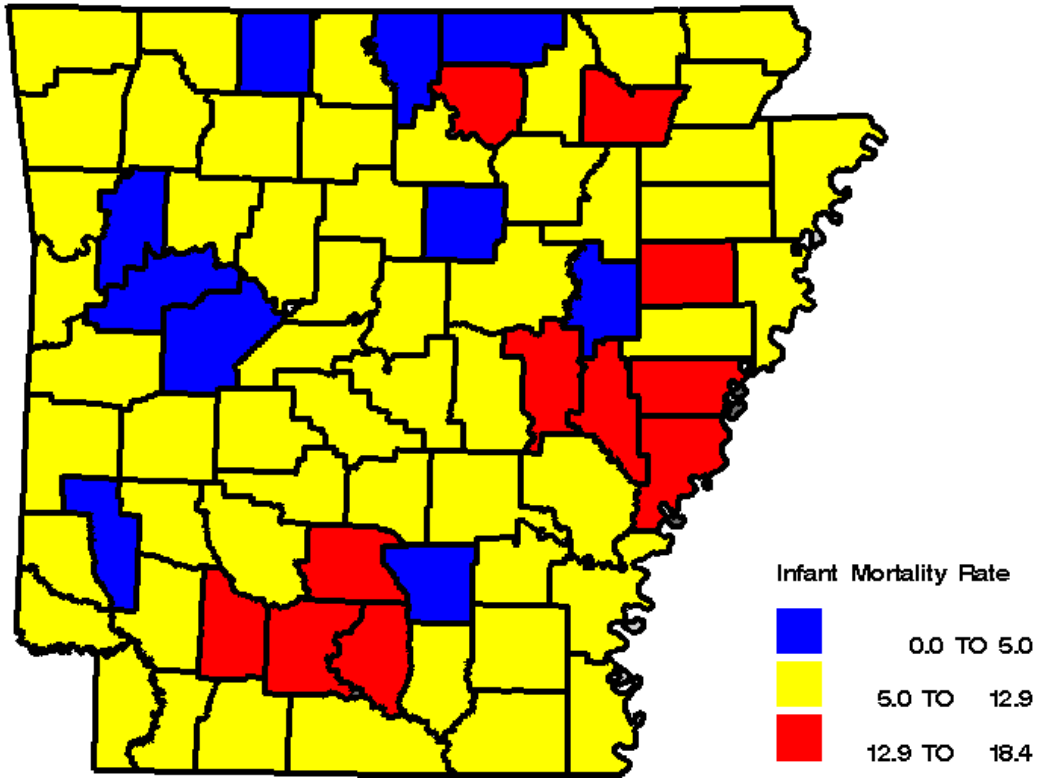


Figure 2: Infant Mortality Rates per 1,000 Live Births by Race and Hispanic Origin



Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, Birth file

Figure 3: Infant Mortality Rate Arkansas 1996-2000



Source: Arkansas County Trends in Maternal and Child Health 1996-2000.

Section MH-2
Low Birthweight by Race and Hispanic Origin

Low birthweight is defined as a weight of less than 5 pounds, 8 ounces (2,500 grams) at birth. Very low birthweight is a weight of less than 3 pounds, 5 ounces (1,500 grams). Low birthweight affects about 1 in every 13 babies born each year in the US. It is a factor in 65 percent of infant deaths. Low birthweight babies may face serious health problems as newborns, and are at increased risk of long-term disabilities such as mental retardation, cerebral palsy, and impairments in lung function, sight, and hearing.

The most effective way to prevent low birthweight is to see a doctor before pregnancy and, once pregnant, get early and regular prenatal care. A pre-pregnancy visit is especially crucial for women with chronic disorders such as diabetes and high blood pressure. Good control of these disorders, starting before pregnancy, reduces the risk of pregnancy complications. All women may benefit from early advice on good nutrition, as well as counseling about the importance of stopping risky behaviors, such as smoking, drinking alcohol, and taking unprescribed drugs.[25]

In the US from 1999 to 2001, about 7.6% of all live births were of low birthweight. The Arkansas population has a higher percentage (8.7%) for low birthweight infants and there has been an upward trend in the US and Arkansas between 1993 and 2001 (**Figure 1**). However, these numbers do not show the disproportionate impact on African Americans. Specifically, the percentage of low birthweight for African Americans in 2001 was 13.6%. The Hispanic population had a lower percentage at 5.9%, while American Indians and Asians were higher at 7.9% and 8.8%, respectively (**Figures 3, 4, 5, and 6**).

The counties with the highest percent of low birthweight infants are clustered in the southeastern half of the state, a part of the state with a high proportion of African Americans (**Figure 7**).

[25] March of Dimes Quick Reference: Low Birthweight. http://www.modimes.org/.

Average Annual Percent Low Birthweight Infants by Race and Hispanic Origin, 1993-2001

Figure 1: All Races

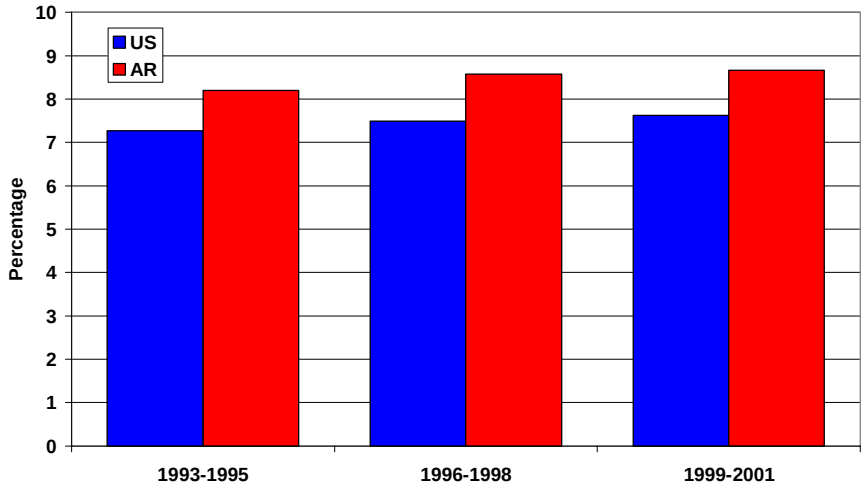
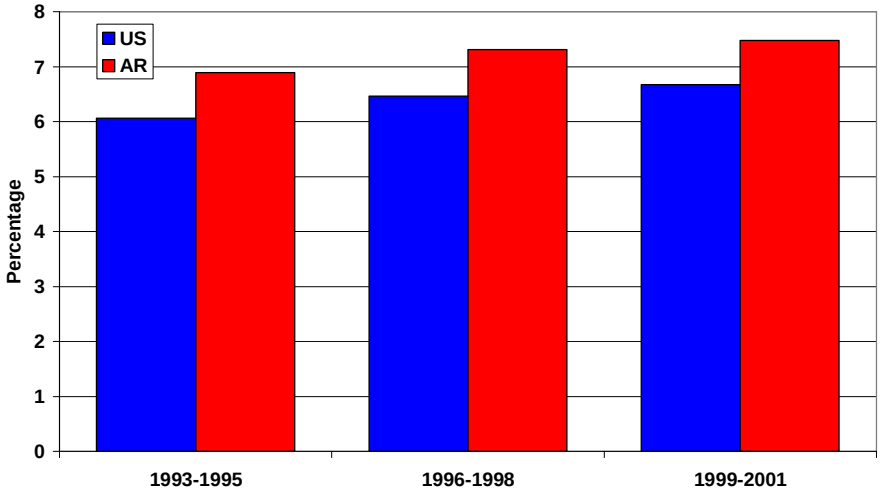


Figure 2: White, non-Hispanic



Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, Birth file.

Figure 3: Black, non-Hispanic

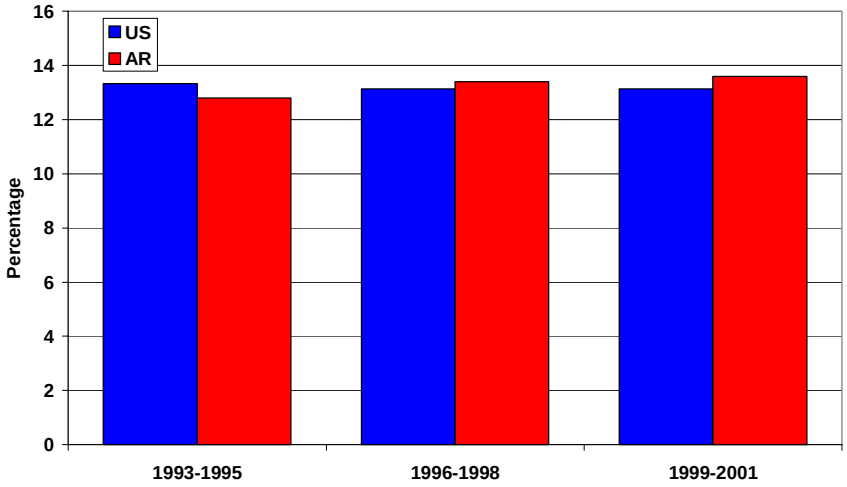
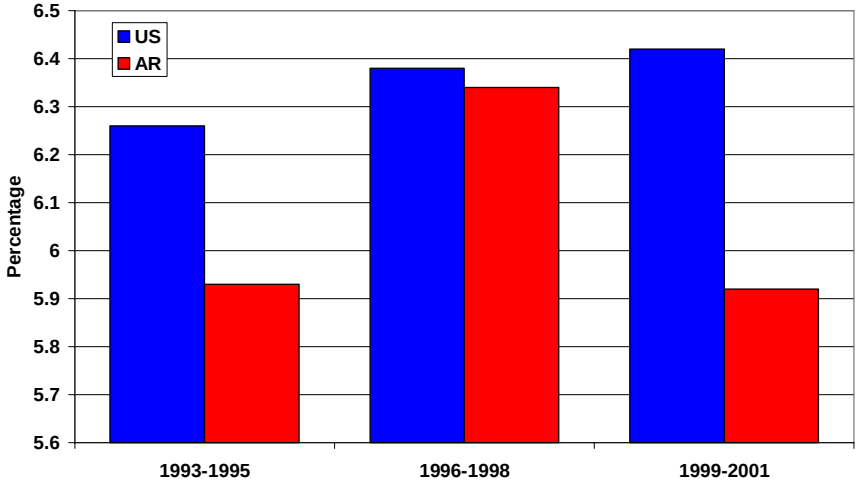


Figure 4: Hispanic



Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, Birth file.

Figure 5: Asian/Pacific Islander

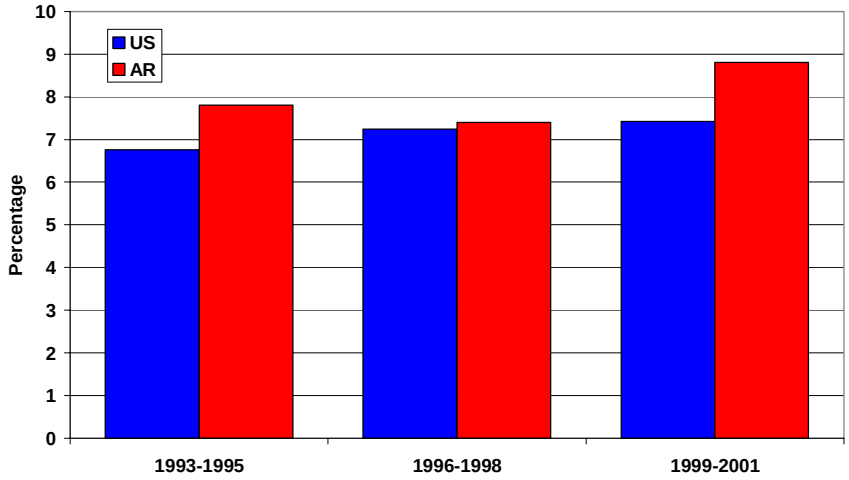
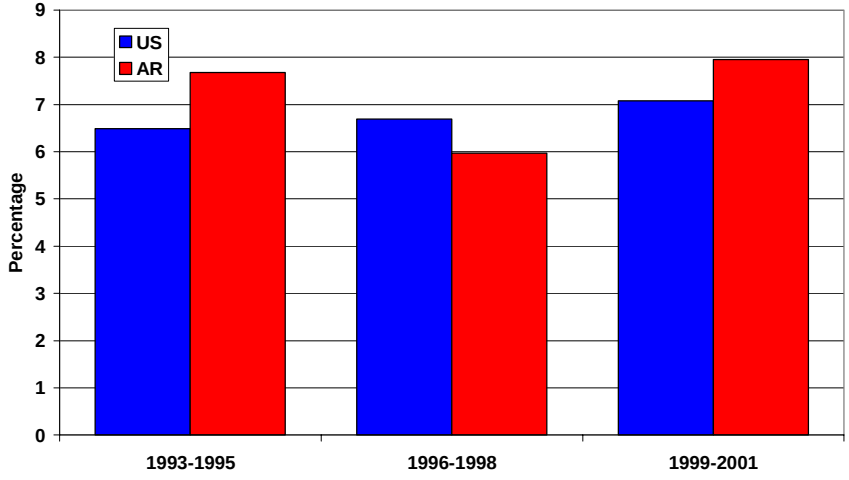
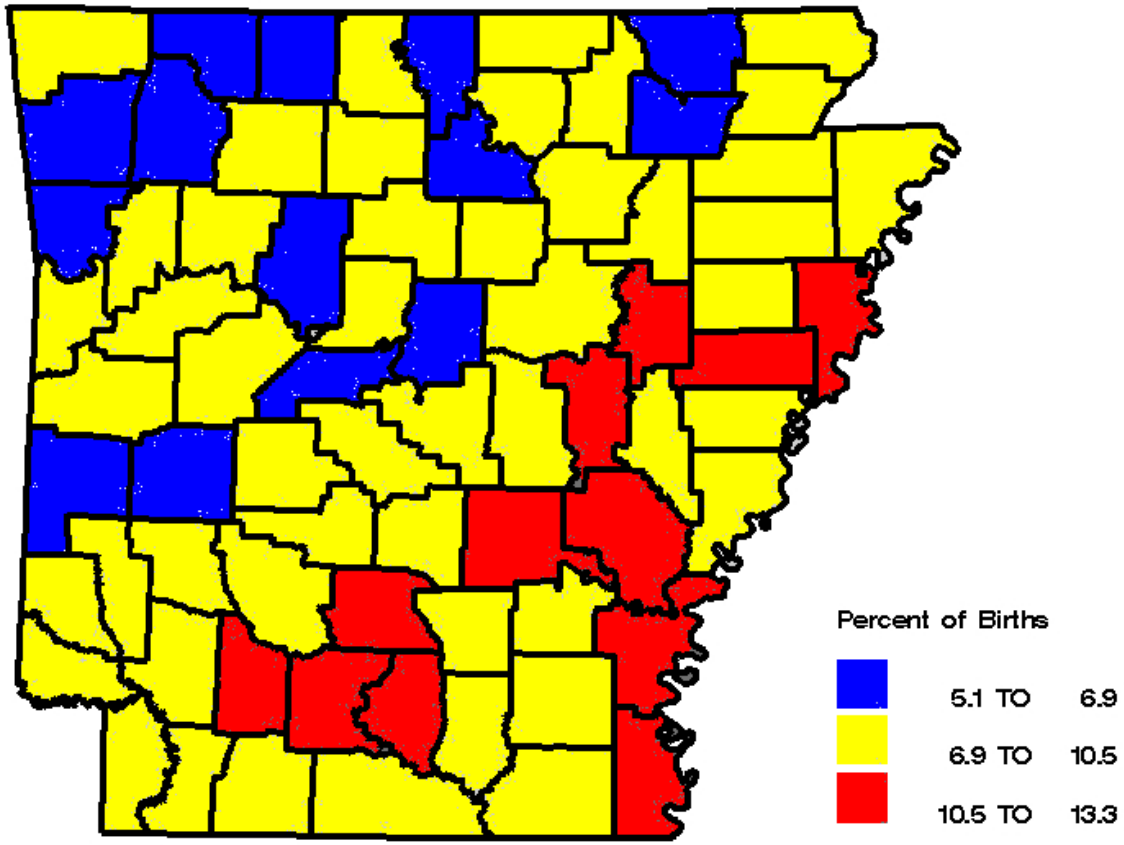


Figure 6: American Indian/Alaskan Native



Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, Birth file.

Figure 7: Low Birthweight Births, Arkansas 1996-2000



Source: Arkansas County Trends in Maternal and Child Health 1996-2000.

Section MH-3
Heart Disease and Ischemic Heart Disease

Diseases may affect many parts of the heart including the muscle, valves, or arteries. Heart disease is the nation's leading cause of death. The most common form of heart disease is coronary artery disease. This is also referred to as ischemic heart disease or heart attack. Much of the burden of heart disease could be eliminated by reducing its major risk factors: high blood pressure, high blood cholesterol, tobacco use, diabetes, physical inactivity, and poor nutrition.

Nationally, heart disease killed more than 700,000 Americans in 2001, accounting for 29% of all deaths in the US. The rate of death from heart disease was 31% higher among Blacks than Whites and 49% higher among men than women. In 2001, heart disease cost the nation $193.8 billion. About 66% of heart attack patients do not make a complete recovery. About 42% of people who experience a heart attack in a given year will die from it.[26]

In 2001, Arkansas's death rate from heart disease was 13% higher than the national rate (246.8 versus 279.1 per 100,000 population). The death rate for the Black population was 40% higher than the national rate. There is no current data on other racial and ethnic minorities.

Current Arkansas data show that for both general heart disease and, more specifically, ischemic heart disease, mortality seems to be on a slight downward trend; however, the African-American population has higher mortality rates (**Figures 1 and 5**). From 1990 to 2000, the difference or disparity has been persistent. The mortality over this time was 25% higher for heart disease generally and 21% higher for ischemic heart disease. These are statistically significant differences, that is to say they are not likely to be due to chance.

The risk of death from heart disease and ischemic heart disease increases with age. Men have higher death rates than women (63% higher for Whites and 47% higher for Blacks). African-American men have the highest death rates throughout most of the life span, followed by White men then African-American women and White women.

Heart disease and ischemic heart disease have by far the largest economic impact of any of the diseases profiled in this report. In the 5 years examined (**Figures 3 and 7**), discharges increased by 9% and 5% for heart disease and ischemic heart disease, respectively. However, total charges increased by 1/3 to nearly $3.5 billion.

The counties with the highest death rates from heart disease in general include Saint Francis (434/100,000), Woodruff (432/100,000), and Phillips (429/100,000) (**Figure 4**).

[26] The Burden of Chronic Diseases and Their Risk Factors: National and State Perspectives. US Department of Health and Human Services, Centers for Disease Control and Prevention. February 2004.

Age-Adjusted Heart Disease Mortality by Race, 1990–2000

Figure 1: Mortality by Race

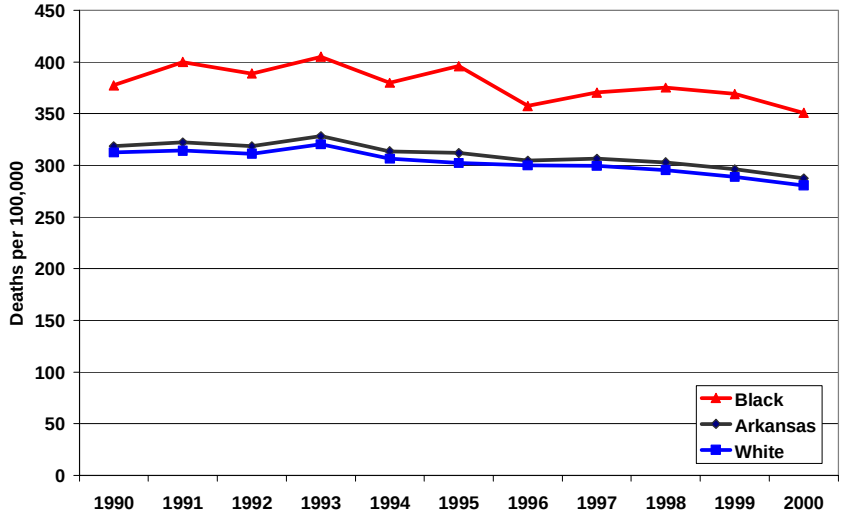
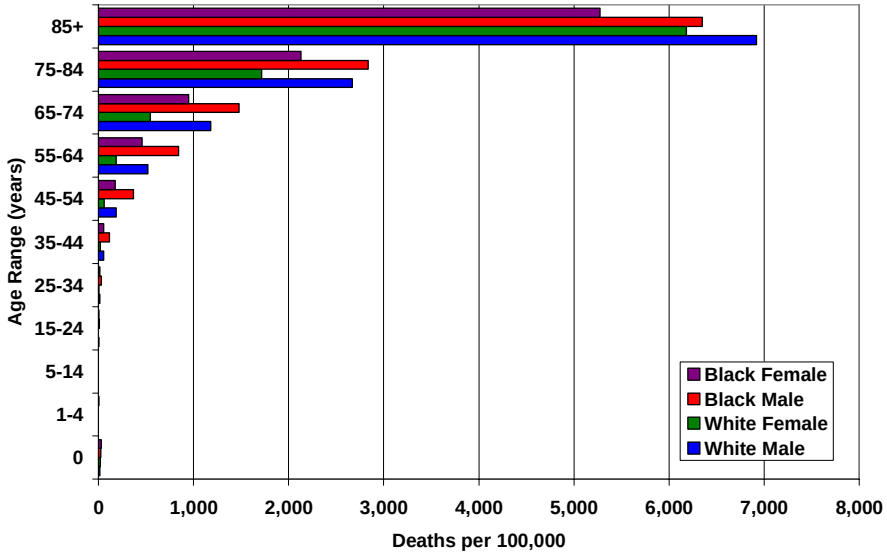
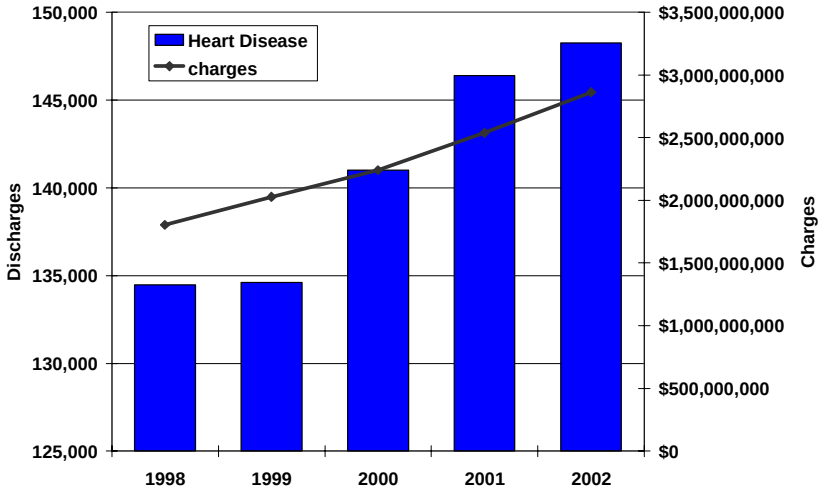


Figure 2: Mortality by Age, Race, and Sex



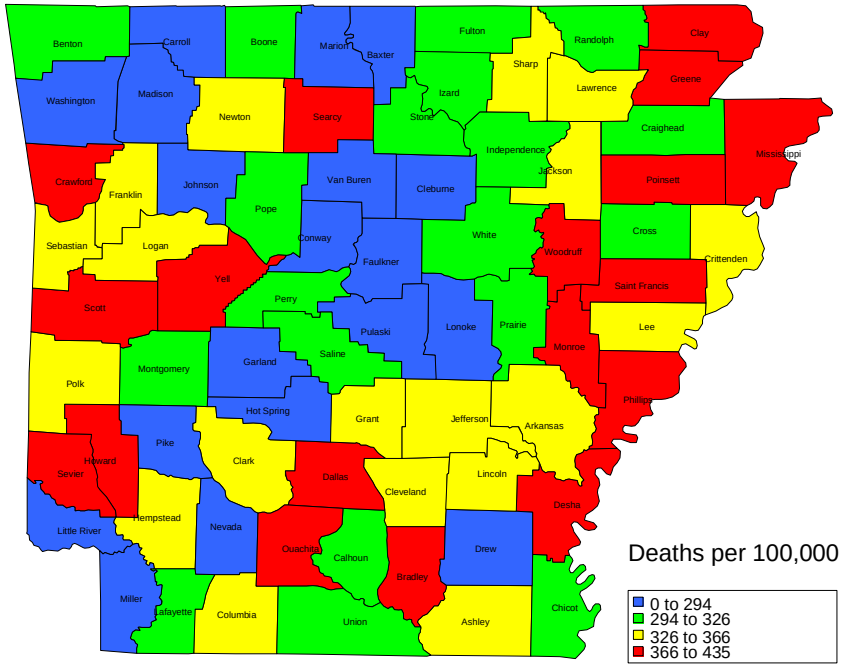
Source: Arkansas Department of Health, Division of Vital Statistics

Figure 3: Hospital Cases: Discharges and Charges



Source: Arkansas Department of Health, Hospital Discharge Database

Figure 4: Heart Disease Mortality by County, 1990-2000



State Average 310/100,000

Source: Arkansas Department of Health, Division of Vital Statistics

Ischemic Heart Disease

Figure 5: Mortality by Race, 1990-2000

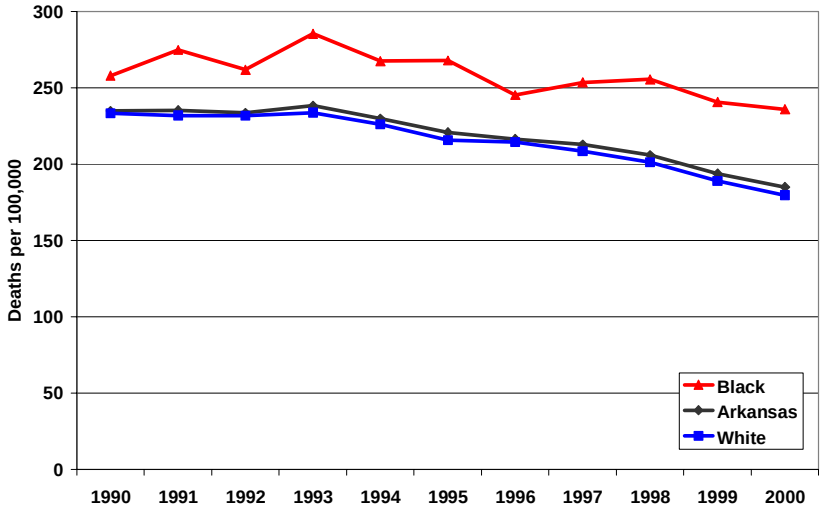
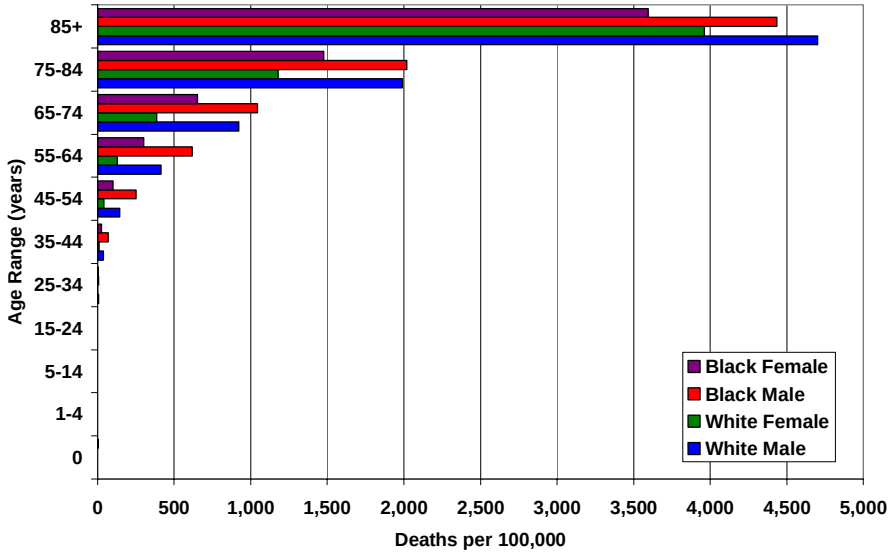
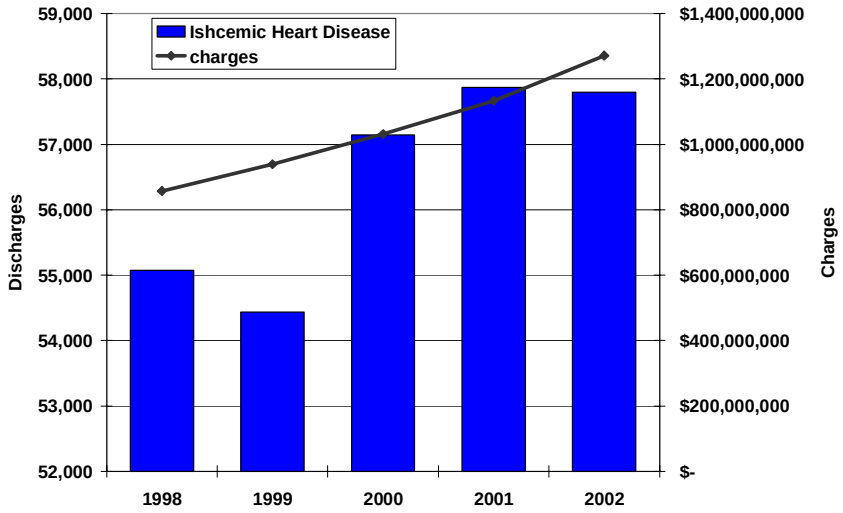


Figure 6: Mortality by Age, Race, and Sex, 1990-2000



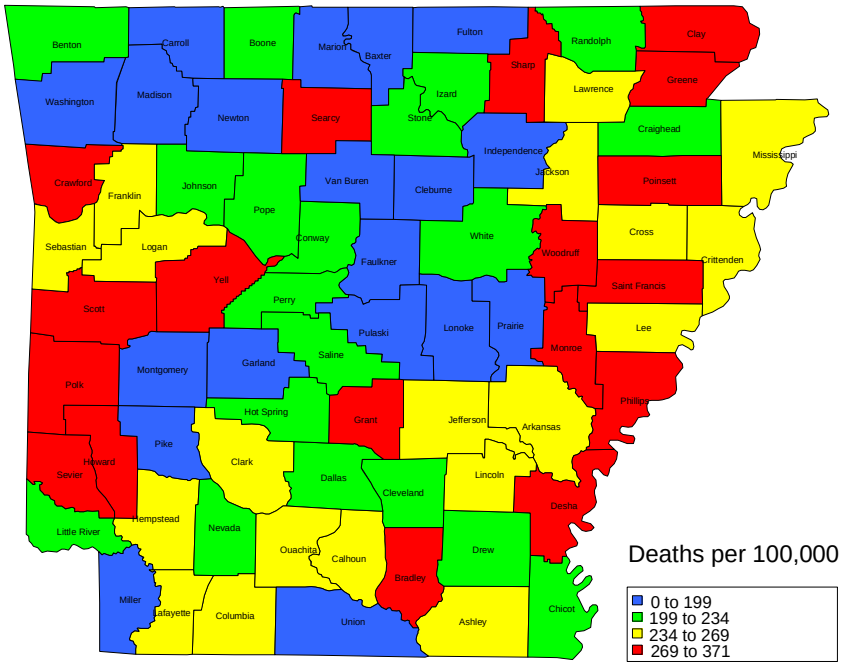
Source: Arkansas Department of Health, Division of Vital Statistics

Figure 7: Hospital Cases: Discharges and Charges



Source: Arkansas Department of Health, Hospital Discharge Database

Figure 8: Ischemic Heart Disease Mortality by County, 1990-2000



State Average 219/100,000

Source: Arkansas Department of Health, Division of Vital Statistics

Section MH-4
Cancer

Cancer is a group of diseases characterized by uncontrolled growth and spread of abnormal cells that may result in death.[27] Cancer is the second leading cause of death in the US. Deaths from cancer made up about 23% of all deaths in the US in 2001. Cancer is largely controllable through prevention, early detection (for some cancers), and treatment. Reducing the nation's cancer burden requires reducing the prevalence of behavioral and environmental factors that increase cancer risk. It also requires ensuring that cancer screening services and high-quality treatment are available and accessible, particularly to medically underserved populations. According to the American Cancer Society, about one-third of cancer deaths that occur in the United States each year are due to poor nutrition, physical inactivity, obesity, or other lifestyle factors and, thus, could also be prevented.

Lung cancer is the leading cause of cancer deaths for men and women. The second leading cause of cancer deaths is breast cancer in women and prostate cancer in men. Colorectal cancer is the third leading cause of cancer deaths in the nation. These four cancers account for about 50% of all cancer deaths.

In 2001, death rates from all cancers in Arkansas were 5% higher than the rest of the nation. However, the impact in minority communities is much greater. The mortality rate for African-Americans was 23% higher than the national mortality rate.

1990-2000 state data show a persistent disparity in cancer death rates between Whites and African Americans. During this time period, the African-American population has had a 28% higher death rate (**Figure 1**). The cancer mortality rate increases with age. Black males have a higher death rate form cancer throughout the lifespan, and Black women have a higher death rate than White women (**Figure 2**). Current data also show an increasing economic burden to the state from cancer. There were 30,229 cancer discharges in 2002 (down from 2001), costing Arkansans over $600 million. The distribution of all cancers by county is seen in **Figure 4**. The counties with highest mortality are Phillips (291/100,000), Monroe (272/100,000), and Woodruff (264/100,000).

[27] American Cancer Society Cancer Facts and Figures 2003.

Age-Adjusted All Cancer Mortality by Race, 1990–2000

Figure 1: Mortality by Race

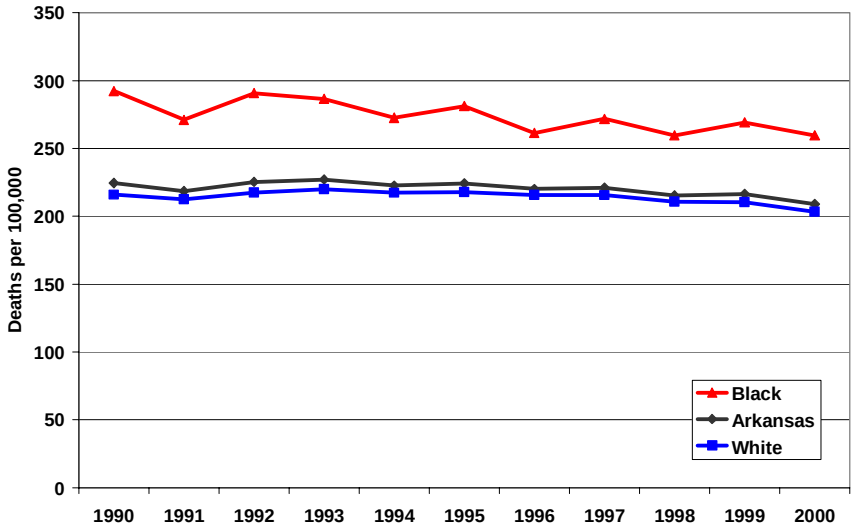
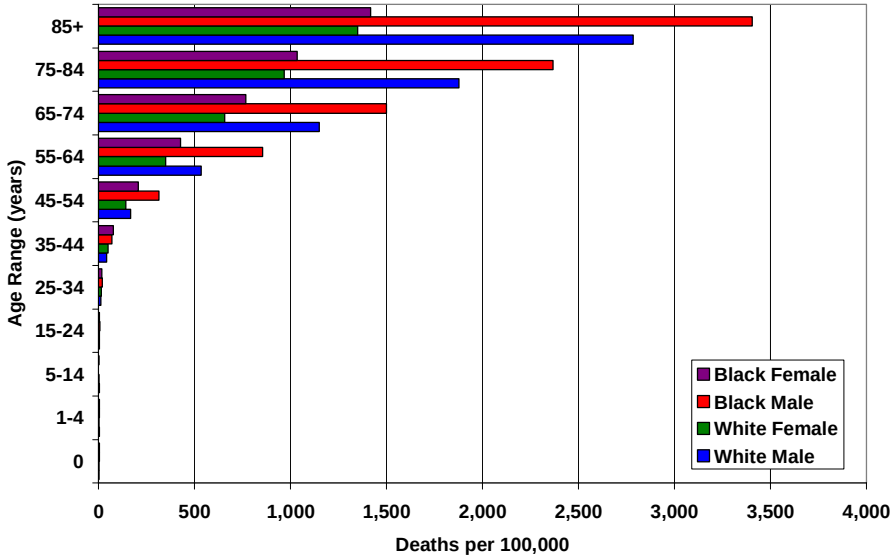
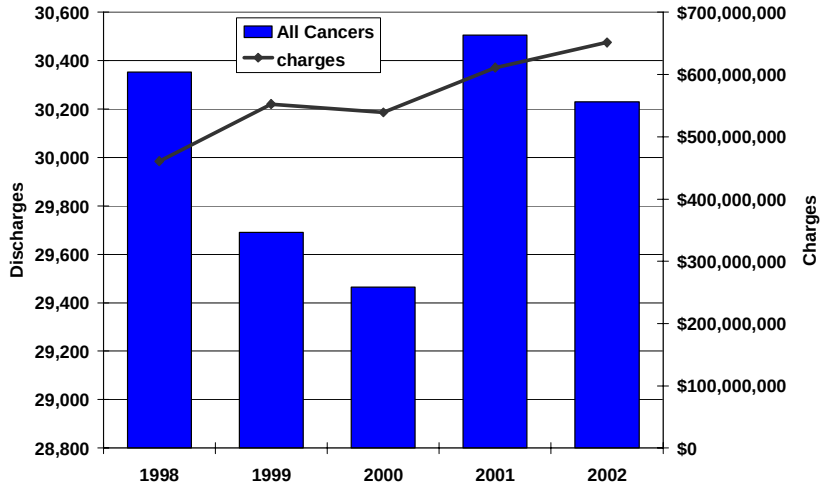


Figure 2: Mortality by Age, Race, and Sex, 1990-2000



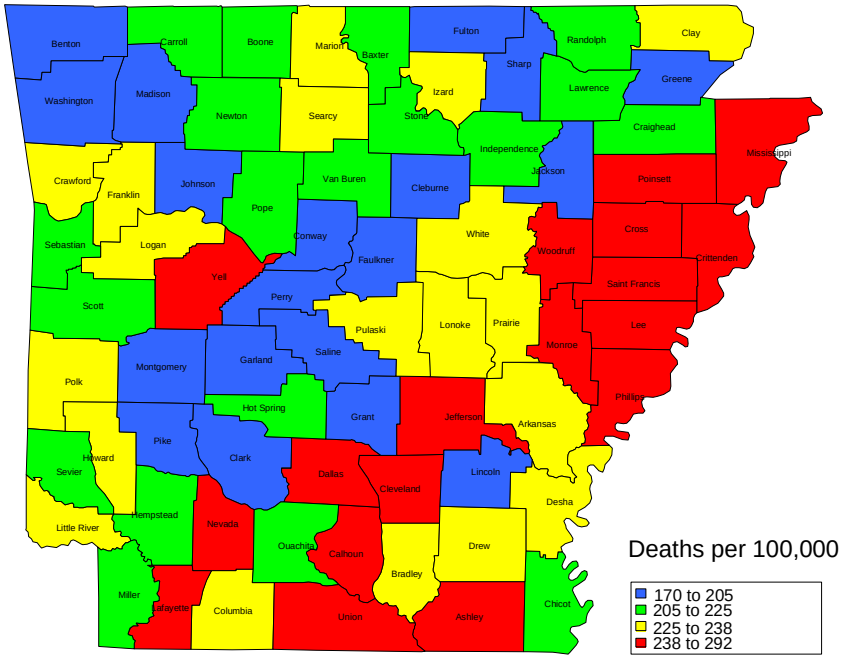
Source: Arkansas Department of Health, Division of Vital Statistics

Figure 3: Hospital Cases: Discharges and Charges



Source: Arkansas Department of Health, Hospital Discharge Database

Figure 4: All Cancer Mortality by County, 1990-2000



State Average 220/100,000

Source: Arkansas Department of Health, Division of Vital Statistics

Section MH-5
Lung Cancer

According to the American Cancer Society, a single behavior—cigarette smoking—is responsible for more than 8 out of every 10 cases of lung cancer. Preventing and reducing cigarette smoking are keys to reducing illness and death from lung cancer. The American Cancer Society estimates that more than 160,400 new cases of lung cancer will be diagnosed in 2004.[28]

The national lung cancer mortality rate was 57.7/100,000 in 2001. Lung cancer accounts for 28% of all cancer deaths. More than 155,900 people died of lung cancer in 2001. This disease is the leading cause of cancer death among men and women, with 58% of lung cancer deaths occurring among men. African Americans have the highest rate of death from lung cancer, and Hispanics have the lowest (63.6/100,000 vs. 23.6/100,000).[29]

In Arkansas from 1990 to 2000, there were over 21,000 lung cancer deaths. There seems to be a difference by race that has been persistent since 1997 (**Figure 1**). However, this difference, a 1% higher death rate for African Americans, is not statistically significant. Lung cancer mortality increases with age and men have higher mortality rates than women. Until age 75, African-American males have higher death rates than White males. Black females have lower lung cancer mortality rates than White females (**Figure 2**).

The state is experiencing increasing economic costs due to lung cancer. In terms of hospital costs in 2002, the hospital discharge database indicates that there was a high of 4,790 discharges with the diagnosis of lung cancer. There was a total cost of over $93 million. The counties with the highest lung cancer mortality rates were Poinsett (98/100,000), Monroe (94/100,000), and Woodruff (92/100,000).

[28] The Burden of Chronic Diseases and Their Risk Factors: National and State Perspectives. US Department of Health and Human Services, Centers for Disease Control and Prevention. February 2004.

[29] The Burden of Chronic Diseases and Their Risk Factors: National and State Perspectives. US Department of Health and Human Services, Centers for Disease Control and Prevention. February 2004

Age-Adjusted Lung Cancer Mortality by Race 1990–2000

Figure 1: Mortality by Race

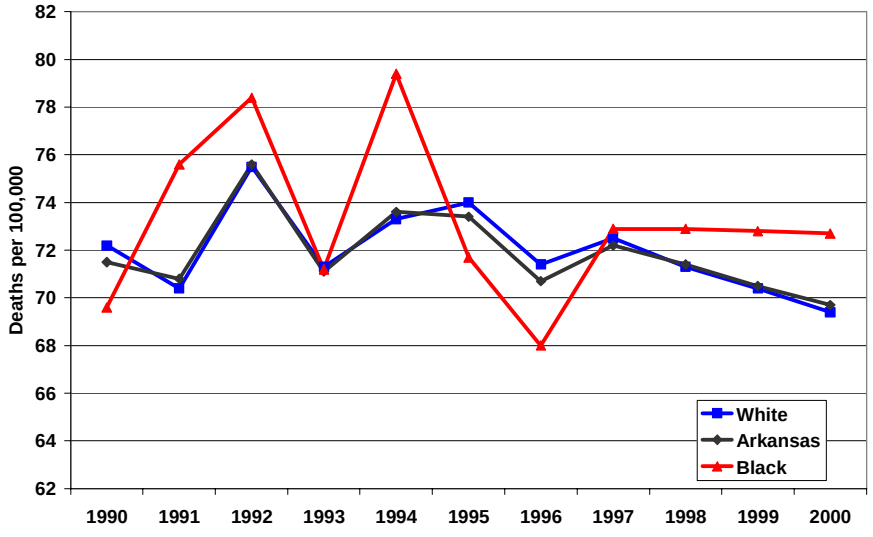
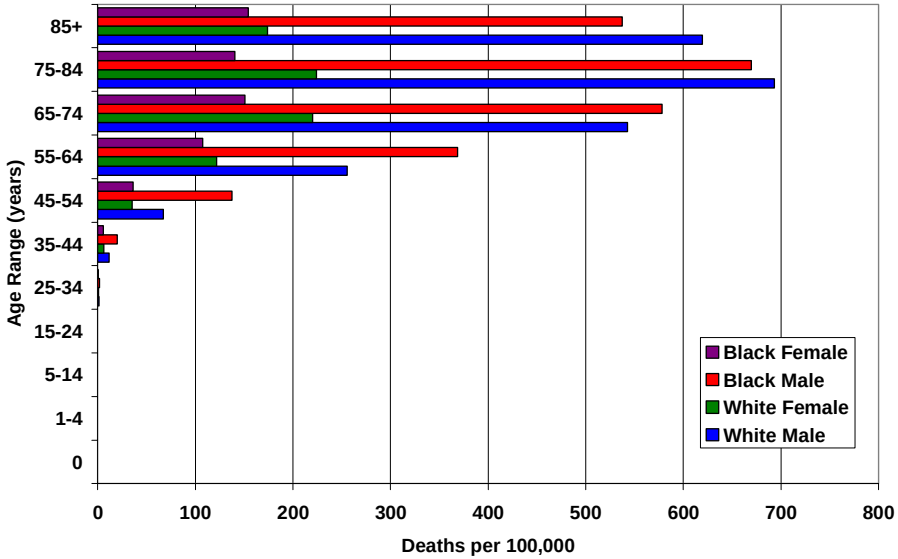
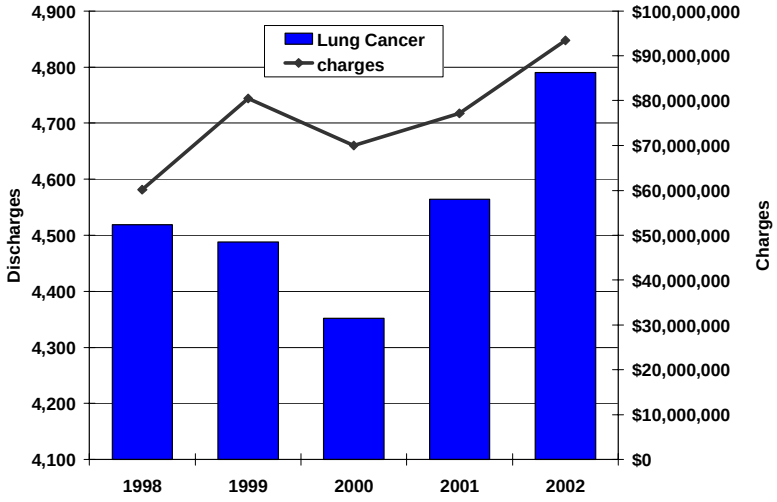


Figure 2: Mortality by Age, Race, and Sex, 1990-2000



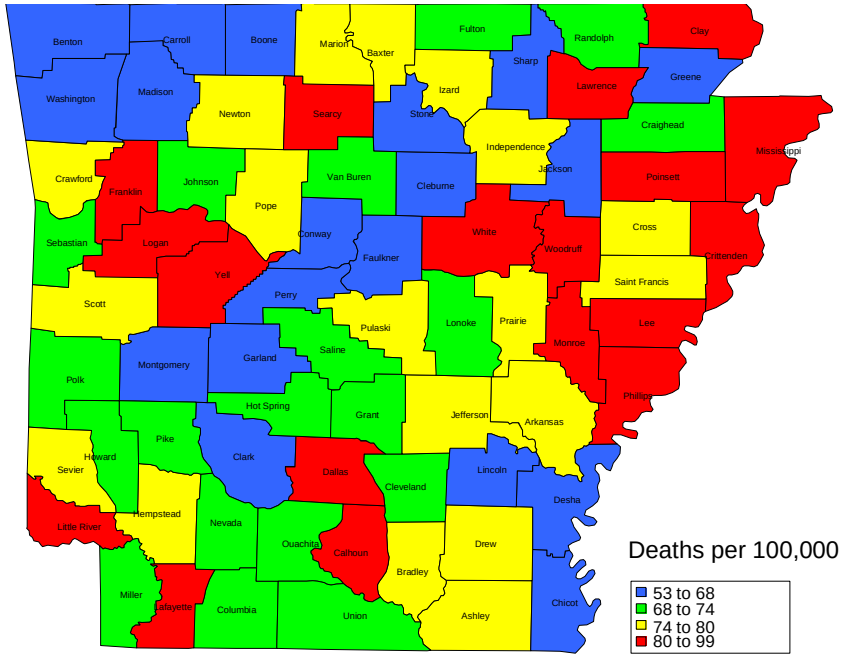
Source: Arkansas Department of Health, Division of Vital Statistics

Figure 3: Hospital Cases: Discharges and Charges



Source: Arkansas Department of Health, Hospital Discharge Database

Figure 4: Lung Cancer Mortality by County, 1990-2000



State Average 72/100,000

Source: Arkansas Department of Health, Division of Vital Statistics

Section MH-6
Colorectal Cancer

Colorectal cancer is the third leading cause of cancer-related deaths in the United States, accounting for 10% of all cancer deaths. The risk of developing colorectal cancer increases with age. Adults who are aged 50 or older, have inflammatory bowel disease, are overweight or physically inactive, and have a personal or family history of colorectal polyps or colorectal cancer are at higher risk. Additionally, low fruit and vegetable intake, a low-fiber diet, alcohol consumption and tobacco use may contribute to a person's risk for colorectal cancer. Three screening tools—fecal occult blood testing, flexible sigmoidoscopy, and colonoscopy—are commonly used to detect colorectal cancer in its early stages, when treatment is most likely to be effective.[30]

In the US, new cases of colorectal cancer have declined over time and have been stable from 1995 to 1999. This is thought to be due in part to increased screening and polyp removal that prevents the progression of polyps to invasive cancer. The death rate from colorectal cancer has also decreased 1.7% per year for the past 15 years. In 2001, the national death rate for colorectal cancer was 20.1/100,000. In Arkansas, the death rate was slightly higher at 21.9/100,000[31].

Although Arkansas's mortality rate is close to that of the US, the impact of colorectal cancer on African Americans must be further examined. From 1990 to 2000, the colorectal cancer mortality rate has been significantly higher for African Americans than the rest of Arkansas and the nation. African Americans have a death rate over this time period that is 46% higher than Whites (**Figure 1**). Mortality from colorectal cancer increases with age. Within the Black population, both males and females have higher death rates throughout the lifespan (**Figure 2**). In 2002, there was a decrease in the number of colorectal cancer discharges, but costs due to this disease continued to rise. In 2002, there were over 2,400 discharges costing over $55 million (**Figure 3**). The counties with the highest colorectal cancer mortality rates are those in the southeastern half of the state. These counties are Woodruff (37/100,000), Phillips (33/100,000), and Arkansas (31/100,000) (**Figure 4**).

[30] The Burden of Chronic Diseases and Their Risk Factors: National and State Perspectives. US Department of Health and Human Services, Centers for Disease Control and Prevention. February 2004.
[31] American Cancer Society, Cancer Facts and Figures 2003.

Age-Adjusted Colorectal Cancer Mortality by Race, 1990–2000

Figure 1: Mortality by Race

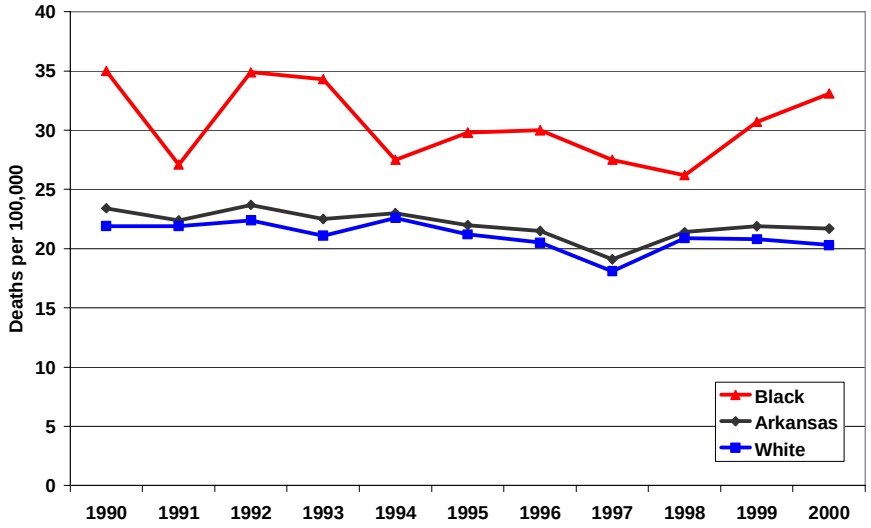
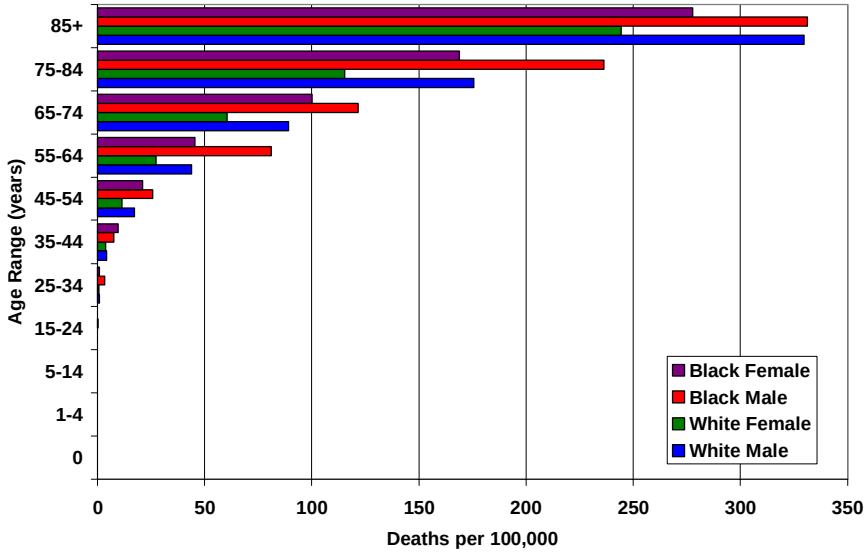
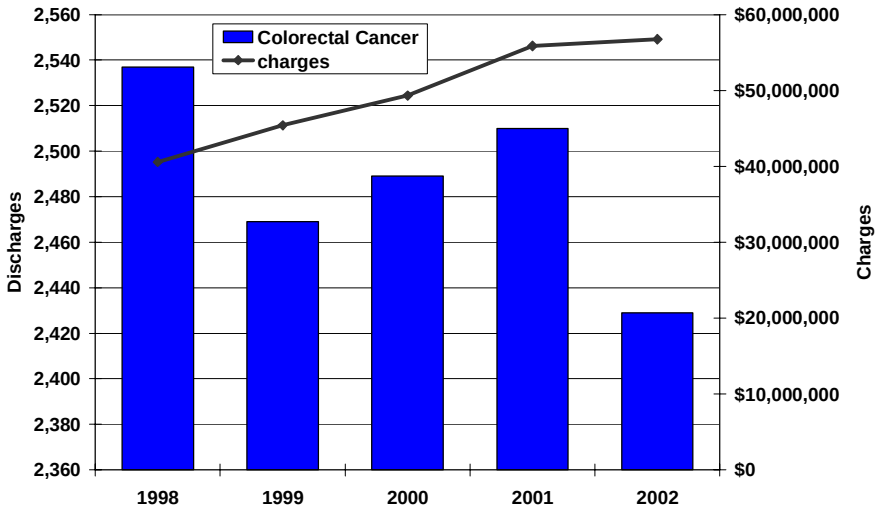


Figure 2: Mortality by Age, Race, and Sex, 1990-2000



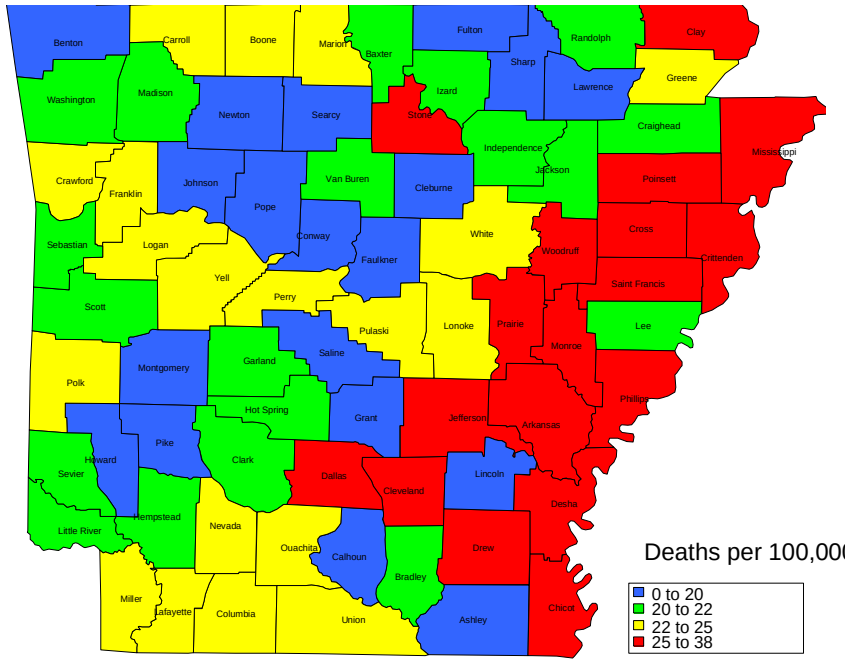
Source: Arkansas Department of Health, Division of Vital Statistics

Figure 3: Hospital Cases: Discharges and Charges



Source: Arkansas Department of Health, Hospital Discharge Database

Figure 4: Colorectal Cancer Mortality by County, 1990-2000



State Average 22/100,000

Source: Arkansas Department of Health, Division of Vital Statistics

Section MH-7
Breast Cancer

Breast cancer is the most common cancer and the second leading cause of cancer-related deaths among American women. Risk factors include older age, later age at birth of first child, family history of breast cancer, diets high in saturated fat, estrogen replacement therapy and moderate obesity. Mammography, the best available method for detecting breast cancer in its earliest, most treatable stage, could find cancer 1–3 years earlier than a woman or her healthcare provider may feel a lump.[32]

Nationally, the mortality rate from breast cancer decreased by 1.4% per year from 1989 to 1995 and decreased by 3.2% thereafter. Younger women, both Black and White, have experienced the largest decreases. These decreases are thought to be due to earlier detection and improved treatment.[33] The US breast cancer mortality rate in 2001 was 26.0 per 100,000. For Arkansas in 2001, the breast cancer mortality rate was slightly lower at 24.7 per 100,000. However, the death rate for African-American women was 24% higher than White women (30.0/100,000 versus 24.1/100,000).

In Arkansas over the last decade, there have been persistent differences in breast cancer mortality by race. There was little disparity reflected in the 1990 mortality statistics. This fact may be due to small numbers of African-American deaths in that year. However, since 1998, the disparity between Black and White women seems to have increased. From 1990 to 2000, African-American women have a breast cancer mortality rate that is 43% higher than White women (**Figure 1**). Breast cancer mortality increases with age, and Black women have a higher mortality rate throughout the lifespan. The highest disparity is in the 45–54 year-old group (**Figure 2**). There was a decrease in breast cancer discharges in 2002; however, healthcare costs from this disease continue to increase. In 2002, over $17 million in hospital charges were recorded for breast cancer (**Figure 3**).

Finally, breast cancer deaths by county from 1990 to 2000 illustrate areas for intervention. There are concentrations of counties with high death rates in the northeast, southwest, and north central parts of the state. The counties with the highest breast cancer mortality rates are Saint Francis (45/100,000), Union (39/100,000), and Dallas (38.7/100,000) (**Figure 4**).

[32] The Burden of Chronic Diseases and Their Risk Factors: National and State Perspectives. US Department of Health and Human Services, Centers for Disease Control and Prevention. February 2004.
[33] American Cancer Society, Cancer Facts and Figures 2003

Age-Adjusted Breast Cancer Mortality by Race, 1990–2000

Figure 1: Mortality by Race

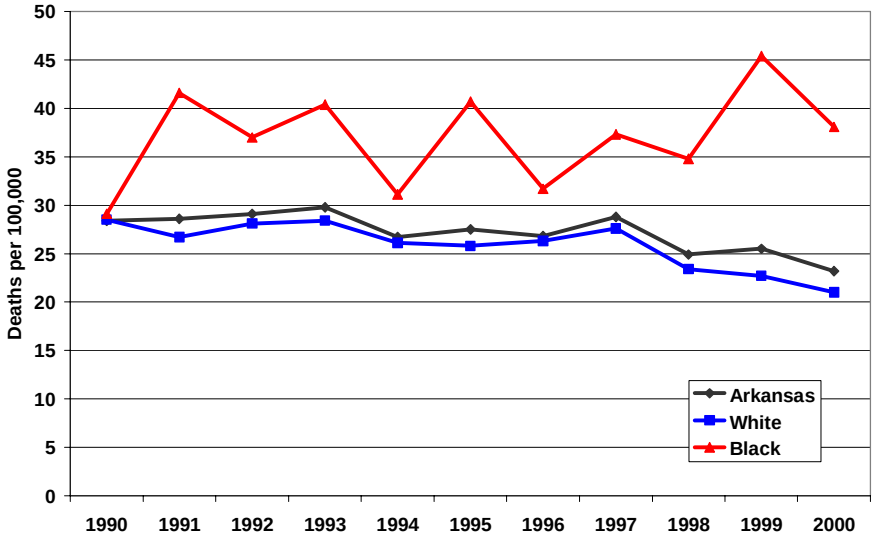
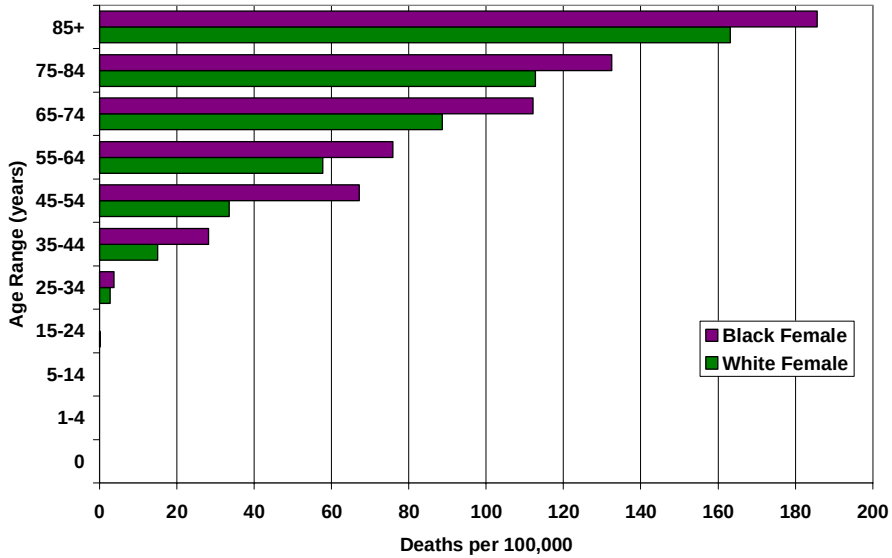
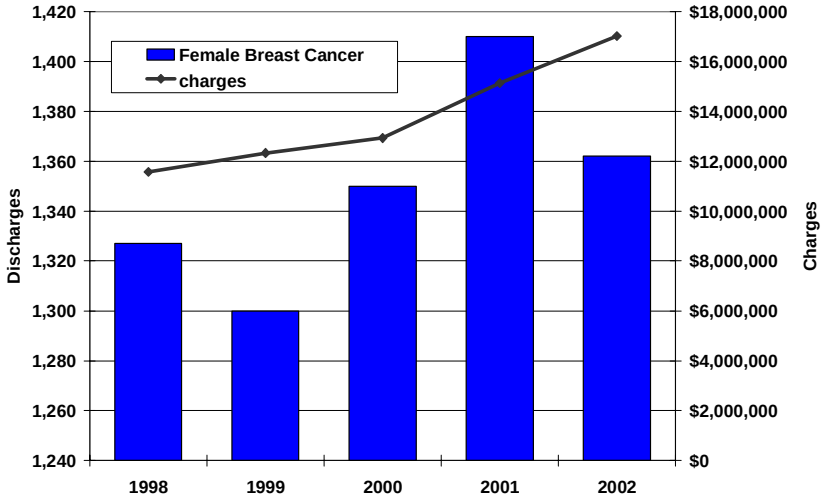


Figure 2: Mortality by Age, Race, and Sex, 1990-2000



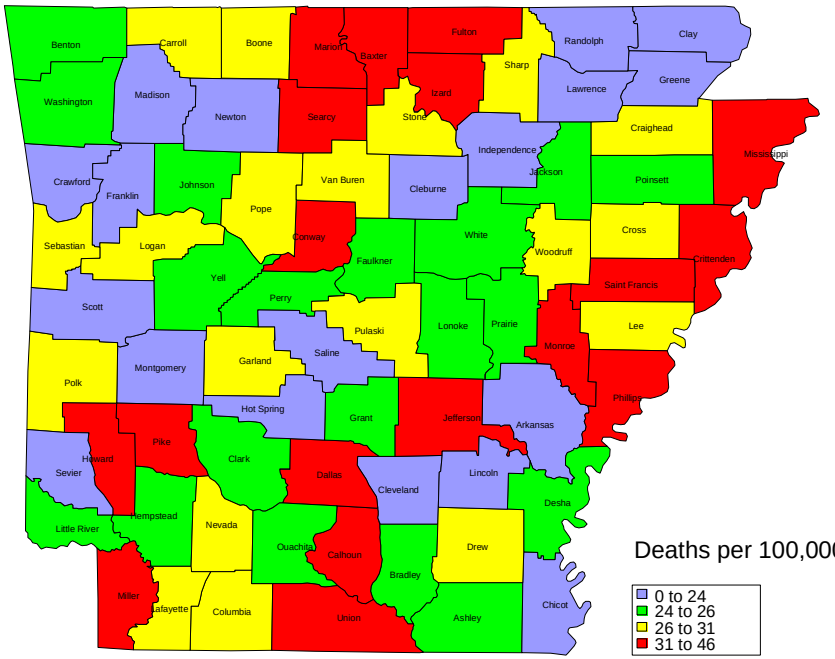
Source: Arkansas Department of Health, Division of Vital Statistics

Figure 3: Hospital Cases: Discharges and Charges



Source: Arkansas Department of Health, Hospital Discharge Database

Figure 4: Breast Cancer Mortality by County, 1990-2000



State Average 27/100,000

Source: Arkansas Department of Health, Division of Vital Statistics

Section MH-8
Cervical Cancer

The cervix is the narrow neck at the lower part of a woman's uterus, just above the vagina. It connects the uterus to the vagina. More than 9 out of 10 cervical cancers originate in the surface cells lining the cervix. Some risk factors for cervical cancer are: not having regular cervical cancer screening, Human Papilloma Virus infection, multiple sexual partners, smoking, and HIV infection.[34] Cervical cancer may be prevented by screening with a Pap smear.

Nationally, new cases of invasive cervical cancer have decreased over time; however, almost twice as many new cases are seen in Black women as compared to White women (13.6/100,000 versus 8.1 per 100,000). As Pap smears have become more prevalent, pre-invasive cervical cancers are detected more commonly.[35] As such, mortality rates have also declined over the past decade. The national age-adjusted mortality rate for cervical cancer from 1996 to 2000 was 3.0/100,000. However, Arkansas had a death rate that was 20% higher than the nation (3.6/100,000)[36].

In Arkansas, the cervical cancer mortality rate also varies by race. From 1990 to 2000, there is a persistent disparity. African Americans have a mortality rate that is 136% higher than White women (7.8/100,000 vs. 3.3/100,000) (**Figure 1**). The greatest difference is seen in the older age groups, specifically those aged 65–84 (**Figure 2**). The discharges from Arkansas hospitals since 1998 have been relatively constant, and there has been an increase in charges over the past 2 years (**Figure 3**). The counties with the highest cervical cancer mortality rates are scattered throughout the state. Counties with the highest mortality rates from 1990 to 2000 are Madison (10.9/100,000), Montgomery (10.8/100,000), and Izard (8/100,000) (**Figure 4**).

[34] National Cancer Institute
[35] American Cancer Society Cancer Facts and Figures 2003
[36] National Cancer Institute SEER database

Age-Adjusted Cervical Cancer Mortality by Race, 1990–2000

Figure 1: Mortality by Race

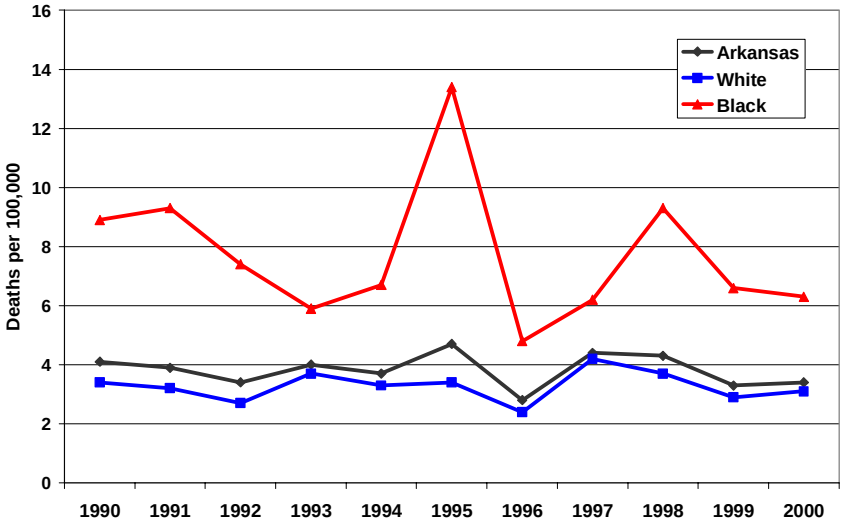
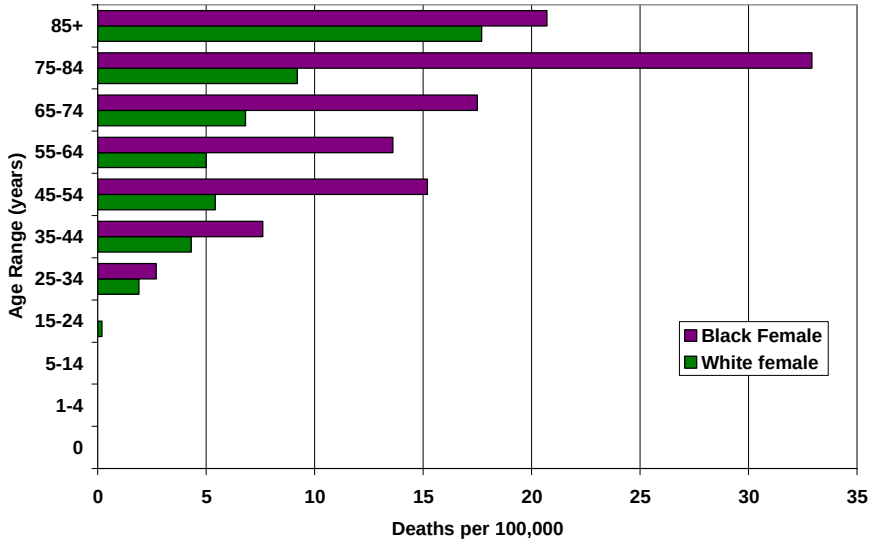
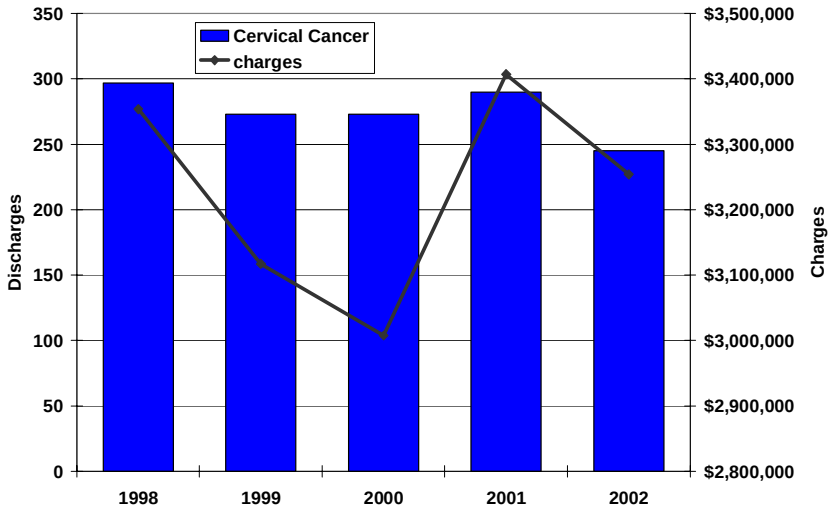


Figure 2: Mortality by Age, Race, and Sex, 1990-2000



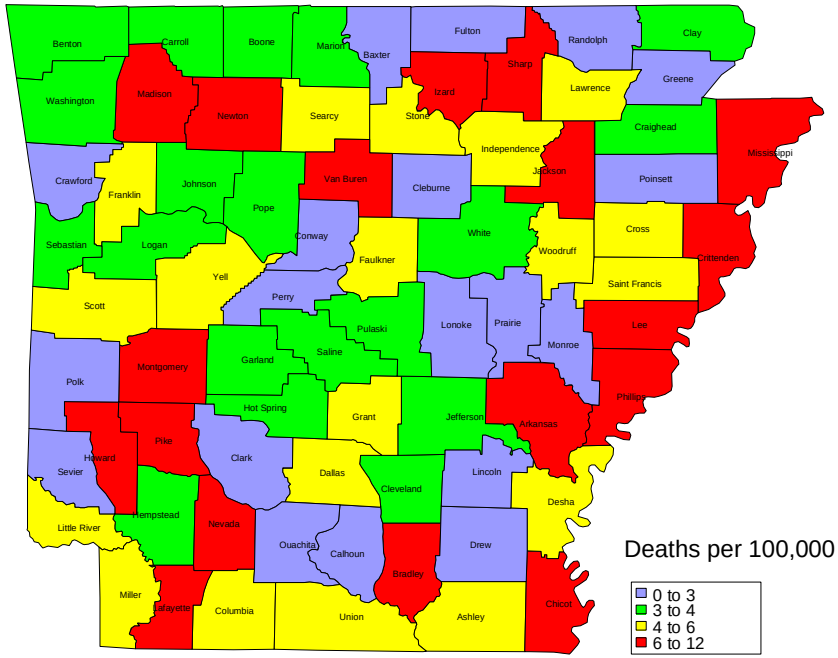
Source: Arkansas Department of Health, Division of Vital Statistics

Figure 3: Hospital Cases: Discharges and Charges



Source: Arkansas Department of Health, Hospital Discharge Database

Figure 4: Cervical Cancer Mortality by County, 1990-2000



State Average 3.8/100,000

Source: Arkansas Department of Health, Division of Vital Statistics

Section MH-9
Prostate Cancer

The prostate, just below the bladder in the male reproductive system, is a gland about the size of a walnut. Prostate cancer is the most common type of cancer (other than skin cancer) in men in the US. Of all the men who are diagnosed with cancer each year, more than one in four has prostate cancer.[37] The cause of prostate cancer is not well understood. It is not clear why some men get it and others do not or why some men die from it and others do not. The known risk factors associated with prostate cancer include age, family history, African-American race, and possibly a diet high in animal fat.

Nationally, in 2003, there were 220,900 expected new prostate cancer cases and 28,900 deaths from prostate cancer.[38] Although death rates have been declining in White and African-American men since the early 1990's, death rates in African-American men remain more than twice as high as rates in White men. In 2000, the death rate from prostate cancer for Black men was 68.1/100,000, whereas for White men, it was 27.8/100,000.[39]

In Arkansas from 1995 to 1999, the prostate cancer mortality rate was 10% higher than the national mortality rate. However, the impact of prostate cancer on African-American men in Arkansas is of much greater magnitude. State data show that from 1990 to 2000, the prostate cancer mortality rate in Black men was more than twice that of White men (**Figure 1**), and the difference is persistent. Black men have higher prostate cancer mortality throughout the lifespan. The number of hospital discharges due to prostate cancer has trended down; however, charges are continuing to increase. The total cost for prostate cancer discharges in 2002 was $16,950,879 (**Figure 3**). The counties with the highest prostate cancer mortality rates are in the southeast portion of the state including the Southeast Public Health Region (**Figure 4**). The counties with the highest prostate cancer death rates are Phillips (77/100,000), Lee (74/100,000), and Dallas (67/100,000).

[37] National Cancer Institute, What you need to know about Prostate Cancer.
[38] Cancer Facts and Figures, American Cancer Society, 2003
[39] Health United States 2003

Age-Adjusted Prostate Cancer Mortality by Race, 1990–2000

Figure 1: Mortality by Race

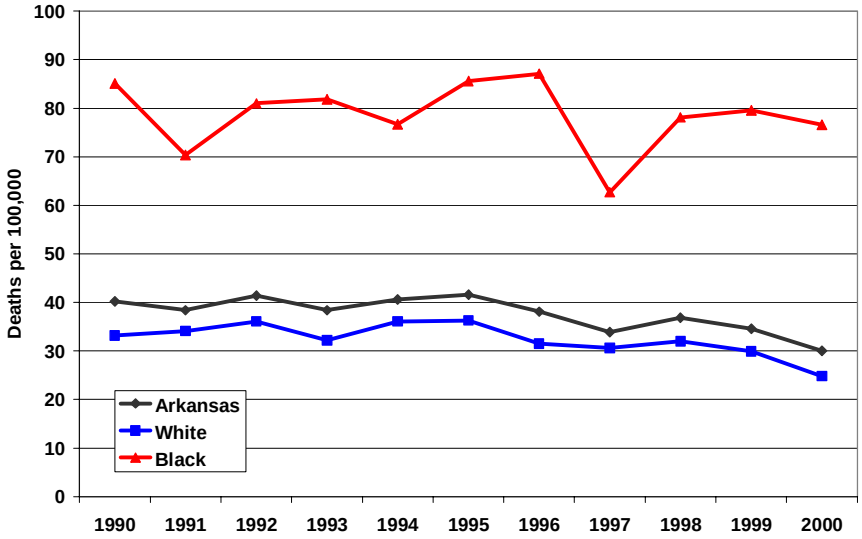
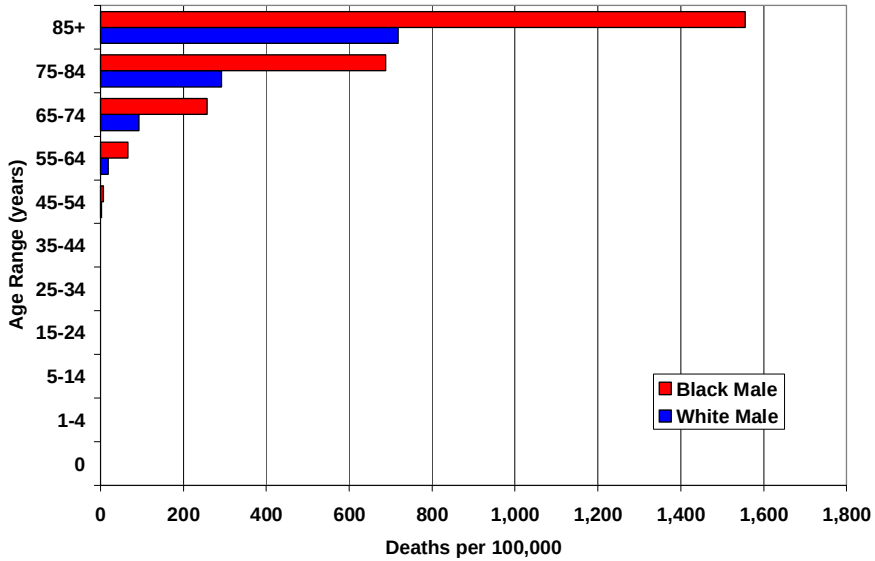
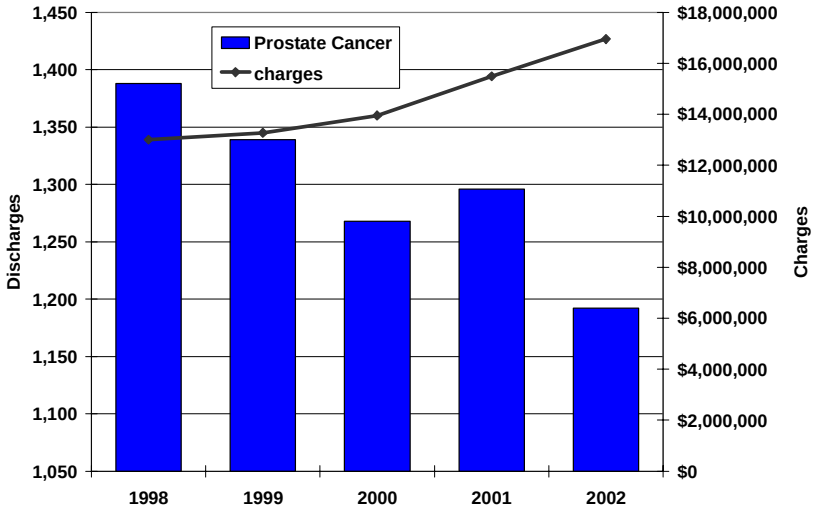


Figure 2: Mortality by Age, Race, and Sex, 1990-2000



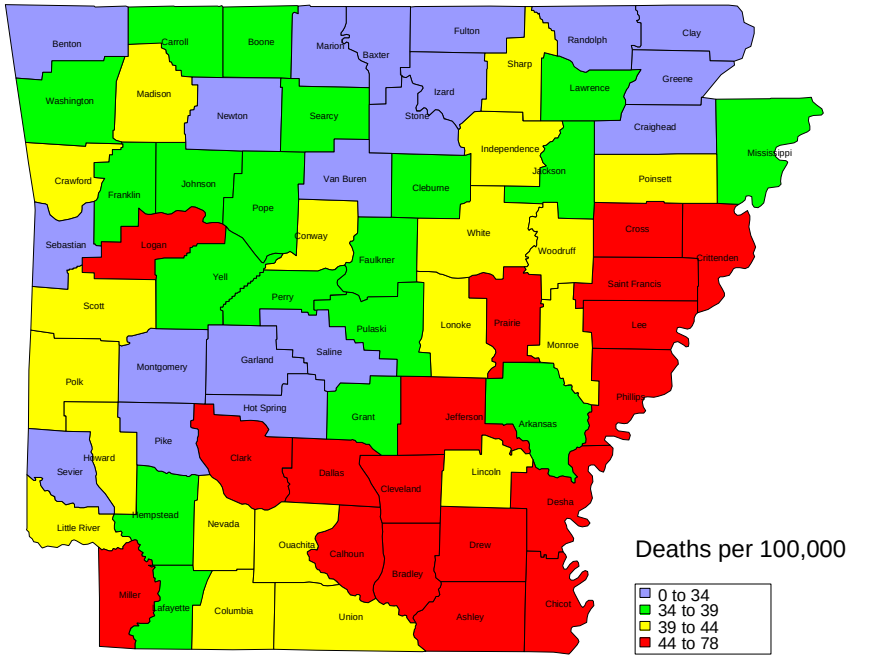
Source: Arkansas Department of Health, Division of Vital Statistics

Figure 3: Hospital Cases: Discharges and Charges



Source: Arkansas Department of Health, Hospital Discharge Database

Figure 4: Prostate Cancer Mortality by County, 1990-2000



State Average 38/100,000

Source: Arkansas Department of Health, Division of Vital Statistics

Section MH-10
Cerebrovascular Disease

Stroke, or cerebrovascular disease, is the third leading cause of death and a major cause of disability in the US. The major risk factors for stroke are high blood pressure, high blood cholesterol, tobacco use, heart disease, diabetes, physical inactivity, and poor nutrition. Preventing stroke and controlling its risk factors are essential to reducing healthcare costs and improving the quality of life among older Americans.

Nationally, in 2001, stroke accounted for more than 163,500 deaths. The age-adjusted death rate for stroke was 57.7/100,000. The death rate in Arkansas was 32% higher. The rates of death from stroke were 43% higher among Blacks compared to Whites.[40]

In Arkansas, African Americans are disproportionately impacted by stroke. Against the backdrop of higher stroke death rates in Arkansas compared to the US, African Americans have a mortality rate that is 36% higher than the mortality rate for Whites (73.9/100,000 versus 100.6/100,000). State data show a statistically significant difference by race. From 1990 to 2000, the age-adjusted mortality rate for African Americans was 45% higher than for Whites (**Figure 1**). Black males have the highest stroke mortality at most ages until they reach age 85 (**Figure 2**). Although it seems that the number of discharges from Arkansas hospitals due to stroke decreased in 2002, hospital charges continue to increase. In 2002, hospital charges totaled over $250 million (**Figure 3**). The counties with the highest stroke mortality rates are in the southeastern half of the state. These counties are Cleburne (169/100,000), Bradley (130/100,000), and Monroe (119/100,000) (**Figure 4**).

[40] The Burden of Chronic Diseases and Their Risk Factors: National and State Perspectives. US Department of Health and Human Services, Centers for Disease Control and Prevention. February 2004

Age-Adjusted Cerebrovascular Disease Mortality by Race, 1990–2000

Figure 1: Mortality by Race

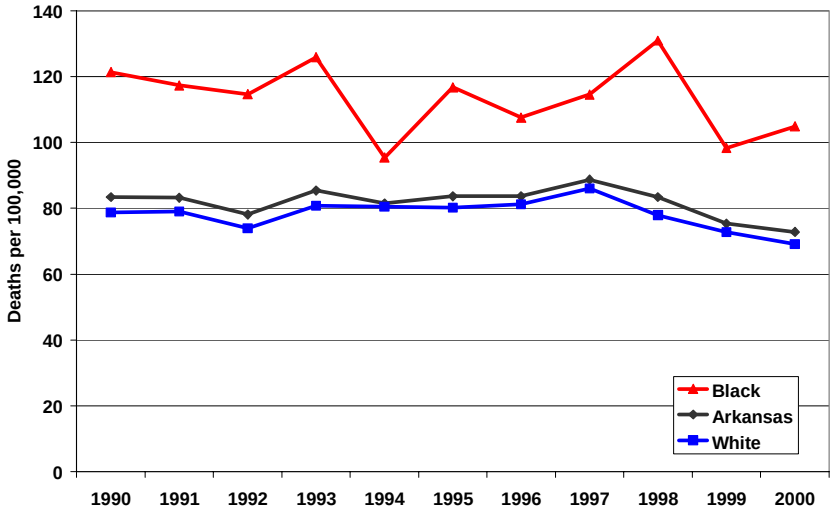
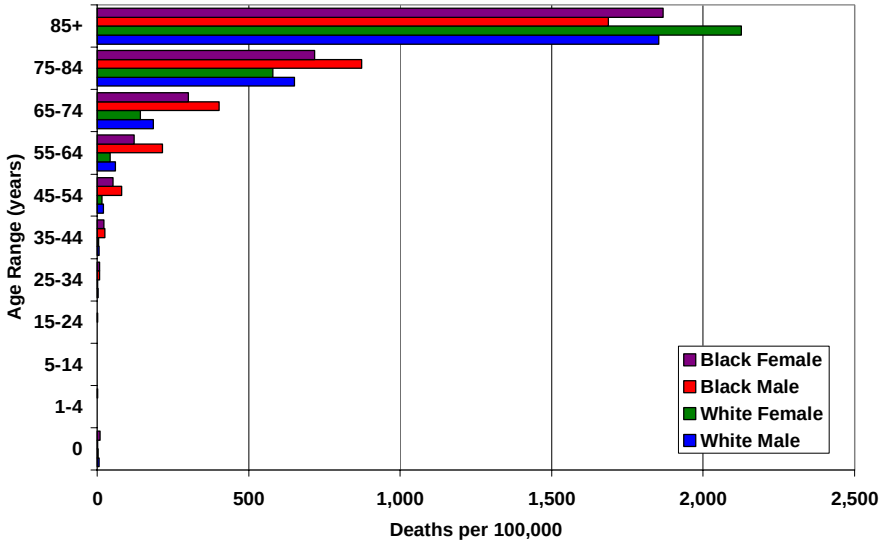
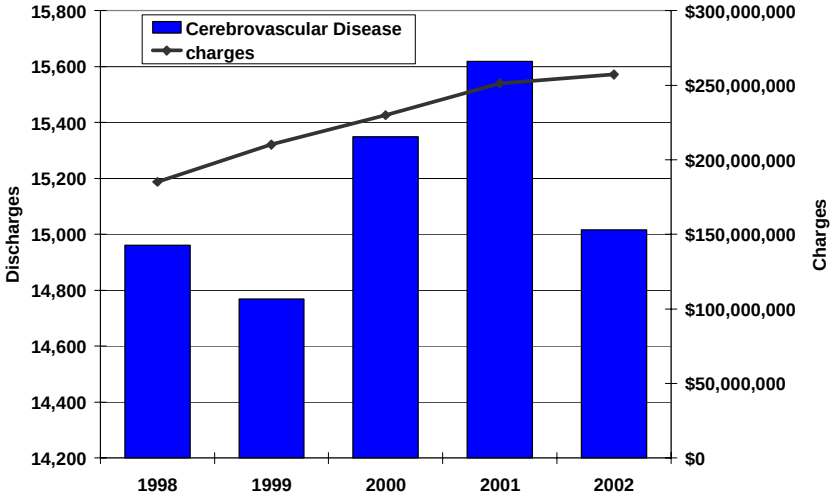


Figure 2: Mortality by Age, Race, and Sex, 1990-2000



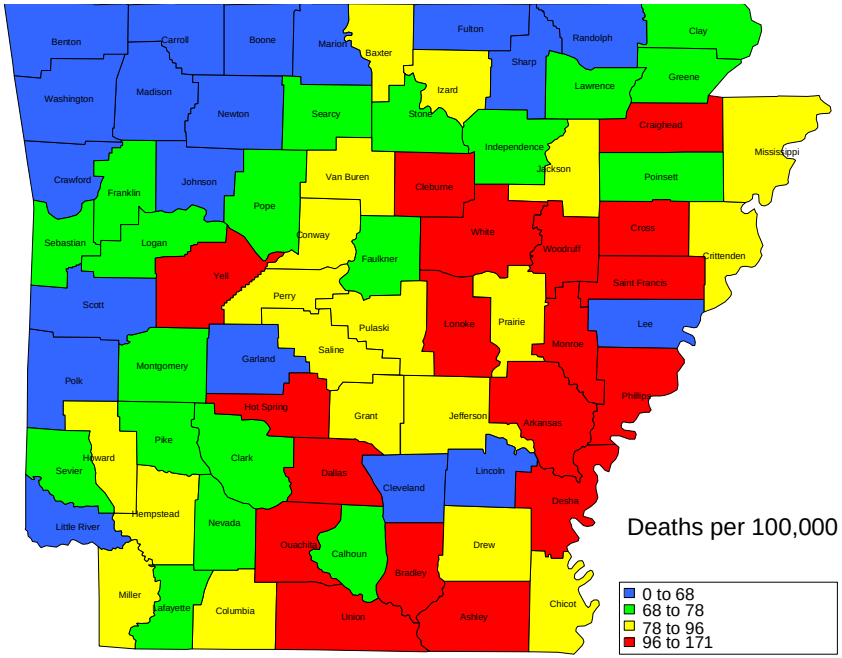
Source: Arkansas Department of Health, Division of Vital Statistics

Figure 3: Hospital Cases: Discharges and Charges



Source: Arkansas Department of Health, Hospital Discharge Database

Figure 4: Stroke Mortality by County, 1990-2000



State Average 82/100,000

Source: Arkansas Department of Health, Division of Vital Statistics

Section MH-11
Accidental Deaths

Unintentional injuries—those caused by accidents—kill more Americans in their first 3 decades of life than any other cause of death. In fact, injuries are a leading cause of death for all ages regardless of gender, race, or economic status. Accidental deaths are the leading cause of death in persons from 1–34 years of age. Millions of Americans are injured each year. For many, the injury causes temporary pain, but for some, injury leads to chronic pain and disability.[41]

In the US from 1999 to 2001, unintentional injuries were the fifth leading cause of death overall. The leading causes of injury death included motor vehicle deaths, falls, and poisonings.[42] The age-adjusted mortality rate for all unintentional injuries was 36/100,000. The death rate for African Americans was comparable at 37/100,000.

Unintentional injury deaths in Arkansas are above the national average. In 2001 the age-adjusted mortality rate was 46/100,000, or 28% higher.[43] From 1990 to 2000, African Americans had a 19% higher death rate from unintentional injuries. There was no difference between racial groups reported in 2000 (**Figure 1**). Consistent with national data, Black and White men tend to have higher injury death rates than women, and injury deaths occur at younger ages (**Figure 2**). The hospital discharges and charges associated with injuries have increased steadily since 1998 (**Figure 3**). The counties with the highest mortality rates tend to be in rural areas. These counties are Searcy (75/100,000), Phillips (72/100,000), and Monroe (70/100,000).

Since motor vehicle accidents (MVAs) are the leading cause of these deaths, they are presented separately. In Arkansas, over the past decade, there has been little difference between Black and White mortality rates. Both are 66% above the national rate of 15/100,000 (**Figure 5**). Motor vehicle fatalities are affecting the total population, with the greatest death rates in the elderly and adolescent and young adult men (**Figure 6**). There are also increasing economic costs in terms of hospital charges and number of patients seen (**Figure 7**). Finally, motor vehicle deaths seem to occur outside of theurban areas of the state. The counties with the highest age-adjusted MVA mortality rates are Searcy (58/100,000), Van Buren (44.4/100,000), and Drew (44/100,000) (**Figure 8**).

[41] Injury Fact Book 2001-2002 National Center for injury Prevention and Control, Centers for Disease control and Prevention.
[42] National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System.
[43] National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System.

Age-Adjusted Accidental Death Mortality by Race, 1990–2000

Figure 1: Mortality by Race

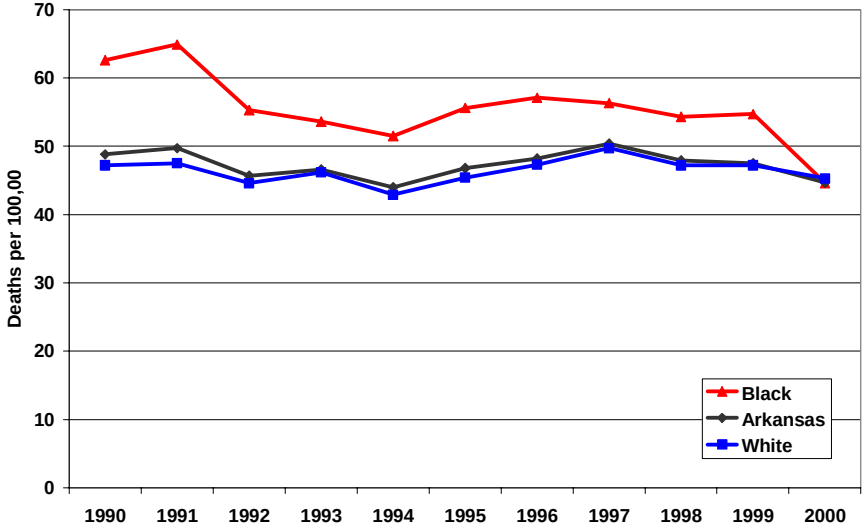
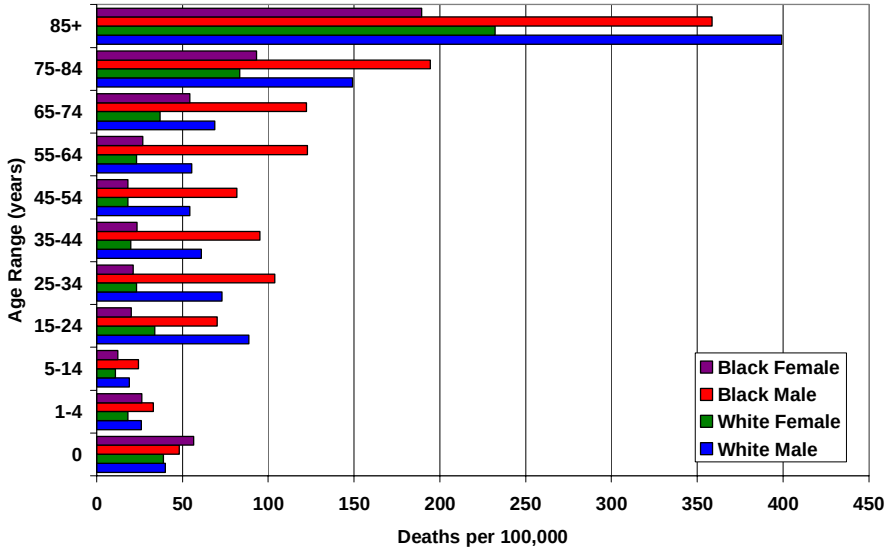
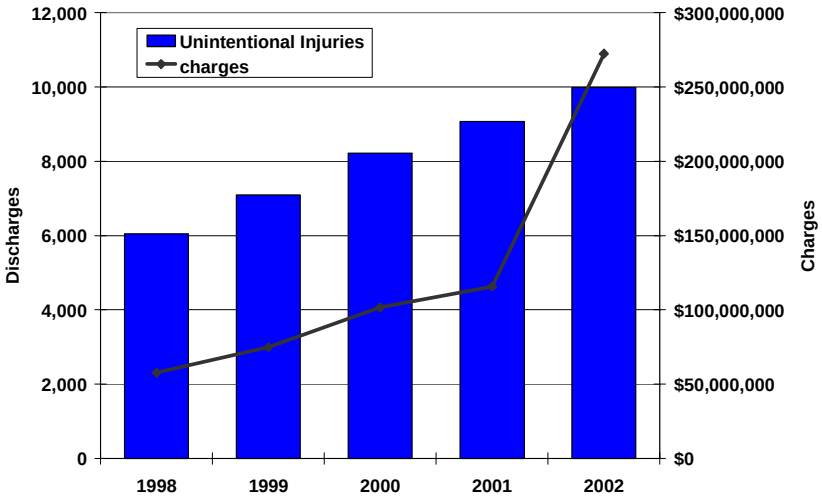


Figure 2: Mortality by Age, Race, and Sex, 1990-2000



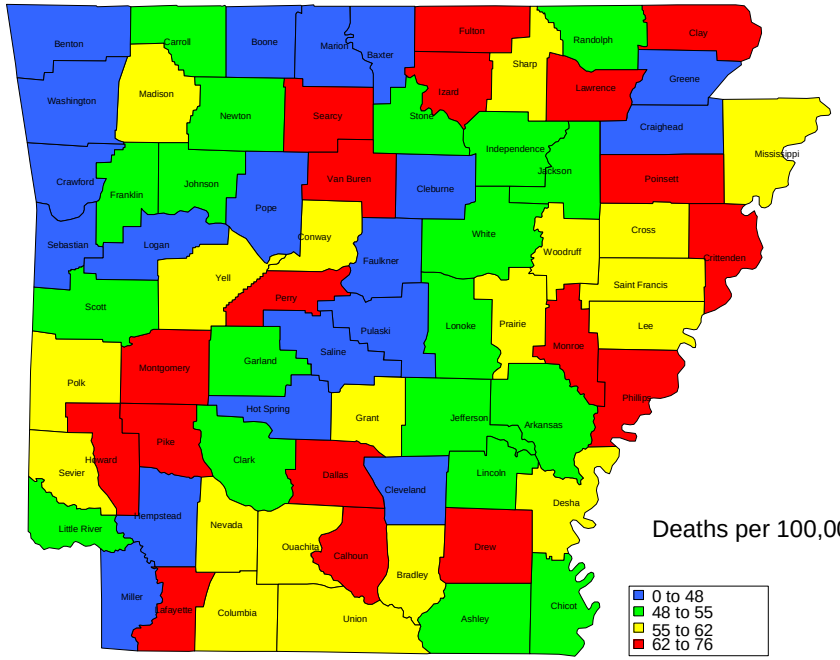
Source: Arkansas Department of Health, Division of Vital Statistics

Figure 3: Hospital Cases: Discharges and Charges



Source: Arkansas Department of Health, Hospital Discharge Database

Figure 4: All Accidents: Mortality by County, 1990-2000



State Average 47/100,000

Source: Arkansas Department of Health, Division of Vital Statistics

Age-Adjusted Motor Vehicle Accident Mortality by Race, 1990–2000

Figure 5: Mortality by Race

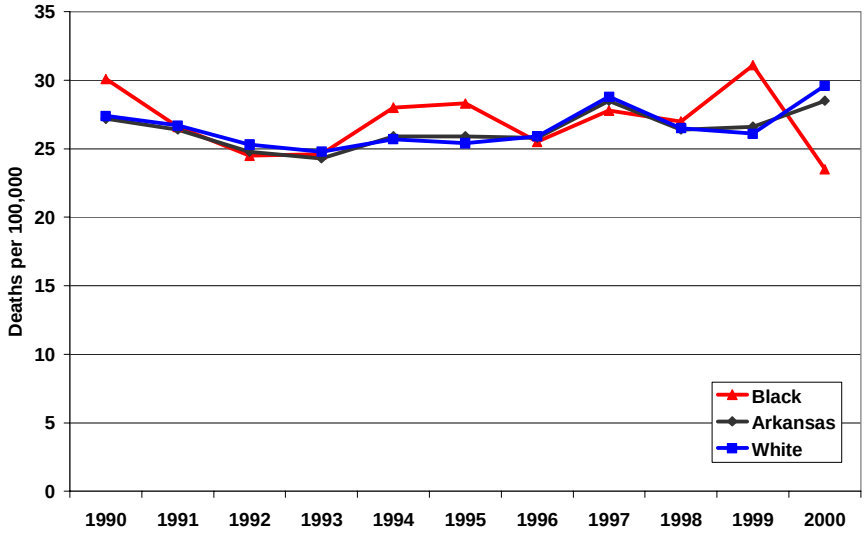
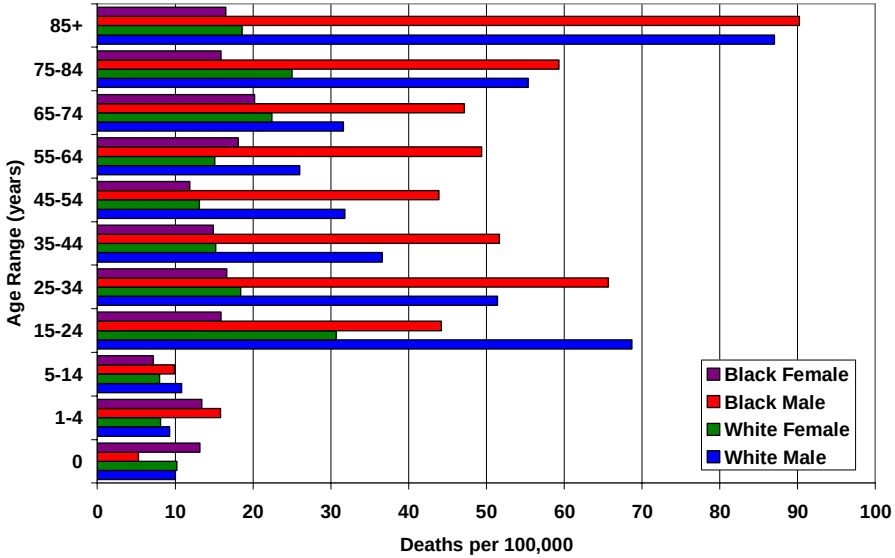
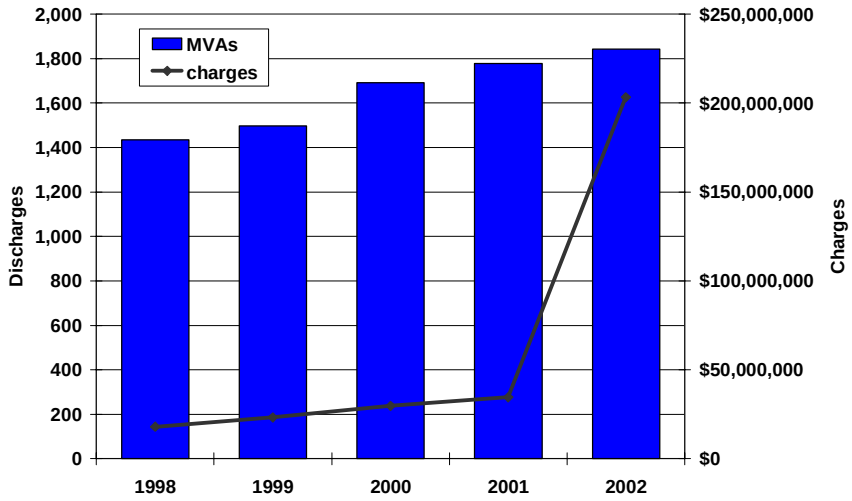


Figure 6: Mortality by Age, Race, and Sex, 1990-2000



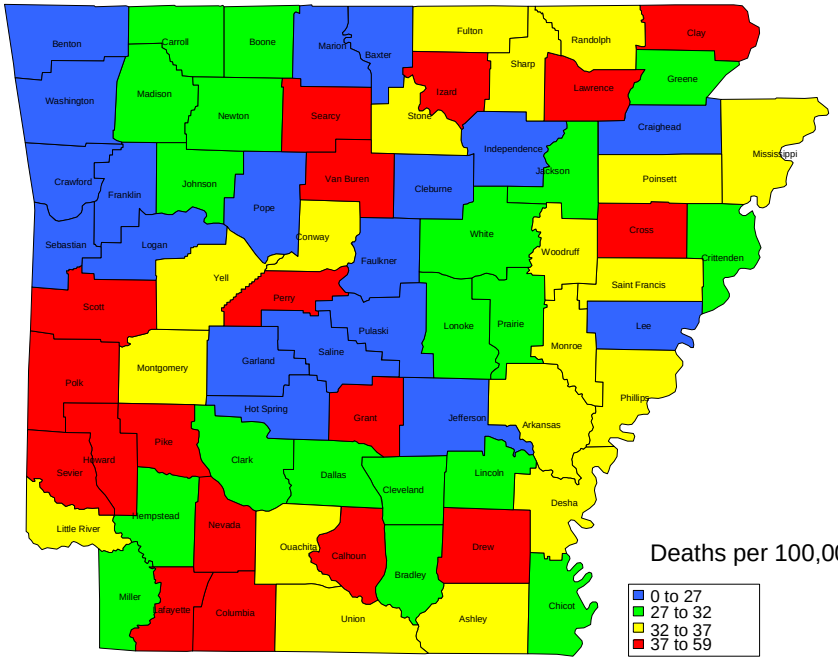
Source: Arkansas Department of Health, Division of Vital Statistics

Figure 7: Hospital Cases: Discharges and Charges



Source: Arkansas Department of Health, Hospital Discharge Database

Figure 8: Motor Vehicle Mortality by County, 1990-2000



State Average 26/100,000

Source: Arkansas Department of Health, Division of Vital Statistics

Section MH-12
Diabetes

Diabetes is a serious, costly, and increasingly common chronic disease that may cause devastating complications—including heart disease, kidney failure, leg and foot amputations, and blindness—that often result in disability and death. Early detection, improved delivery of care, and better self-management are key strategies for preventing much of the burden of diabetes. Type 2 diabetes, formerly considered "adult onset" diabetes, is now being diagnosed more frequently in children and adolescents. This type of diabetes is linked to two modifiable risk factors: obesity and physical inactivity.[44]

Nationally, it is estimated that 18 million people have diabetes, and 5 million are unaware that they have the disease. In 2001, the US age-adjusted mortality rate for diabetes was 25.2/100,000. This is thought to be an underestimate because diabetes is under-reported on death certificates. Arkansas has a mortality rate comparable to the rest of the nation at 25.8/100,000. However, in 2001 the mortality rate for African Americans in Arkansas was 61.7/100,000 or 140% higher.

Over the past decade, the diabetes mortality disparity seems to be increasing. From 1990 to 2000, the mortality rate for African-American Arkansans was 152% higher than for the Whites (18.7/100,000 versus 47.2/100,000) (**Figure 1**). African Americans at all ages die at higher rates from diabetes. Above age 65, Black females have the highest mortality; however, below age 65, Black males have the highest mortality rates (**Figure 2**). Hospital discharges and charges continue to increase with charges in excess of $350 million for 2002 (**Figure 3**). The counties with the highest diabetes mortality rates are scattered throughout the state, with concentration in the Delta region and on the northwest border. The counties with the highest mortality rates are Phillips (53.2/100,000), Drew (40.2/100,000), and Calhoun (39.3/100,000) (**Figure 4**).

[44] The Burden of Chronic Diseases and Their Risk Factors: National and State Perspectives. US Department of Health and Human Services, Centers for Disease Control and Prevention. February 2004

Age-Adjusted Diabetes Mortality by Race, 1990–2000

Figure 1: Mortality by Race

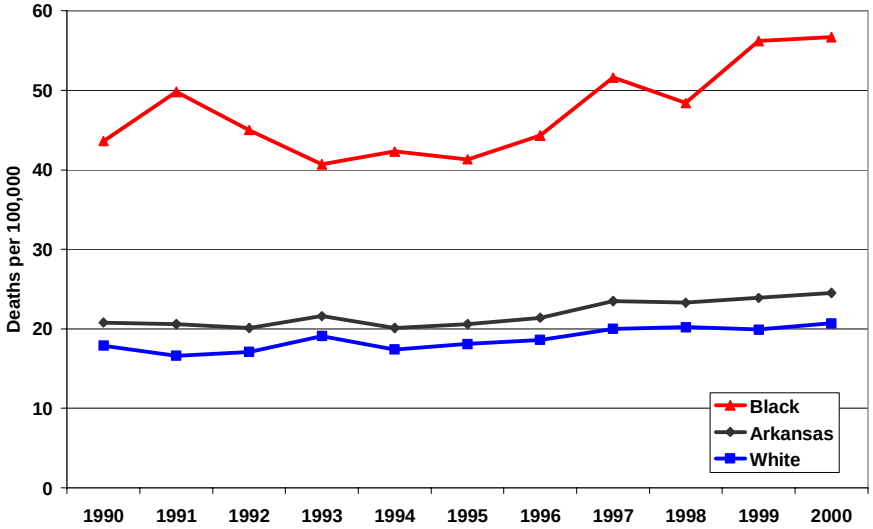
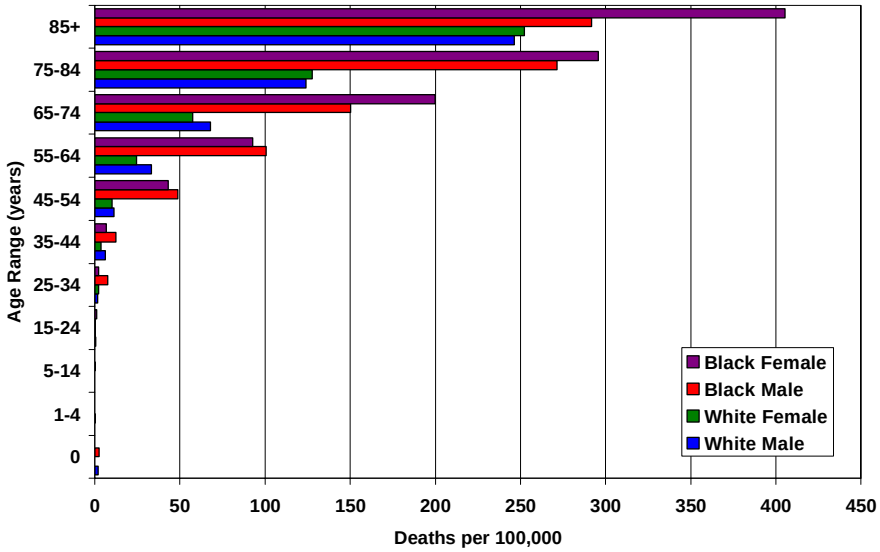
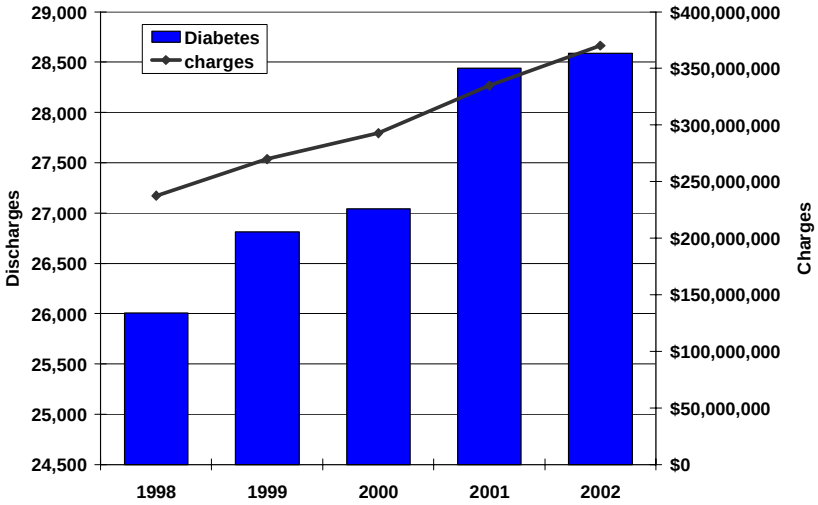


Figure 2: Mortality by Age, Race, and Sex, 1990-2000



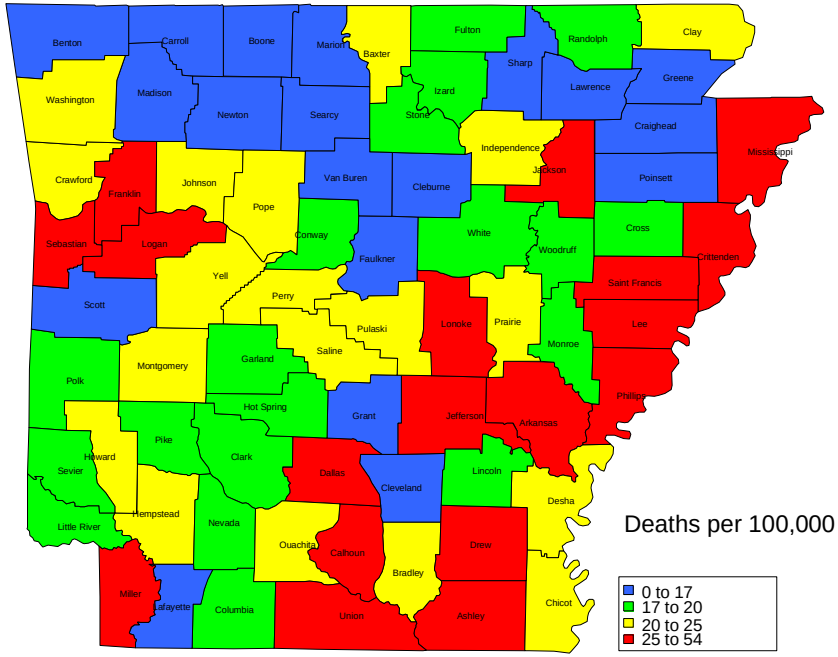
Source: Arkansas Department of Health, Division of Vital Statistics

Figure 3: Hospital Cases: Discharges and Charges



Source: Arkansas Department of Health, Hospital Discharge Database

Figure 4: Diabetes Mortality by County, 1990-2000



State Average 22/100,000

Source: Arkansas Department of Health, Division of Vital Statistics

Section MH-13
Asthma

Asthma is a disease of the lungs that causes repeated episodes of wheezing, breathlessness, chest tightness, and night-time or early morning coughing. It is the most common long-term disease of children. Some of the triggers of asthma attacks include environmental factors such as smoke, dust mites, outdoor air pollution, pets, mold, and cockroach allergen.[45] The Allergy and Asthma Foundation of America recently ranked Little Rock as the second of the top 100 metropolitan "asthma capitals". The ranking took mortality rates, among other data, into account in ordering the cities with the highest asthma burden.

Nationally, in 2001, 14 million adults and 6.3 million children had asthma, and 5.7% of children (or 4.3 million) had an attack in the previous year.[46] The mortality rate from asthma in 2001 was 1.5/100,000. The African-American age-adjusted mortality rate was 3.6/100,000, while the White rate was 1.2/100,000.

From 1990 to 2000, African Americans were more likely to die from asthma. The mortality rate for African Americans in Arkansas was almost 200% higher than for Whites (**Figure 1**). The disparity has been persistent over time. African-American males ages 5–14 and those above age 55 have increased mortality rates, and African-American females ages 15–54 have increased mortality from asthma (**Figure 2**). Hospital charges for asthma doubled to nearly $120 million in only a three year period (**Figure 3**).

The counties with the highest mortality rate due to asthma include Phillips (5.9/100,000), Lincoln (5.7/100,000), and Woodruff (5.0/100,000) (**Figure 4**).

[45] Center for Disease Control and Prevention, National Center for Environmental Health
[46] National Center for Health Statistics Fast Stats A to Z.

Age-Adjusted Asthma Mortality by Race, 1990–2000

Figure 1: Mortality by Race

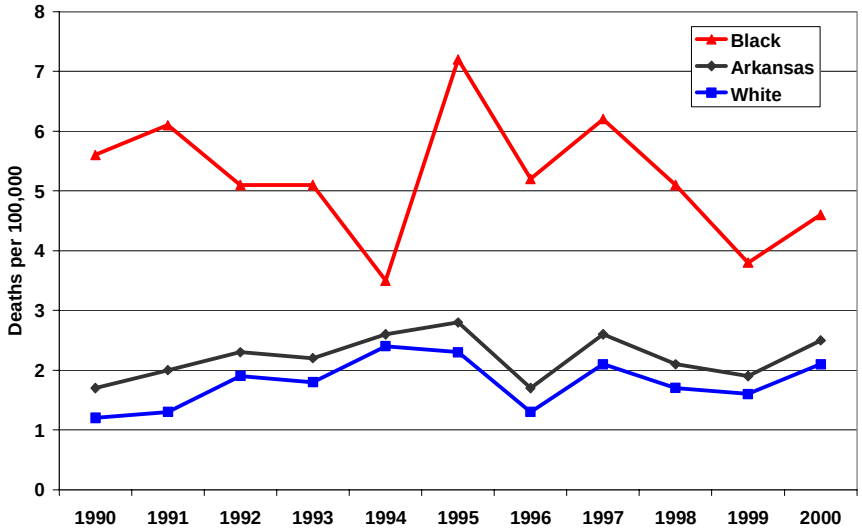
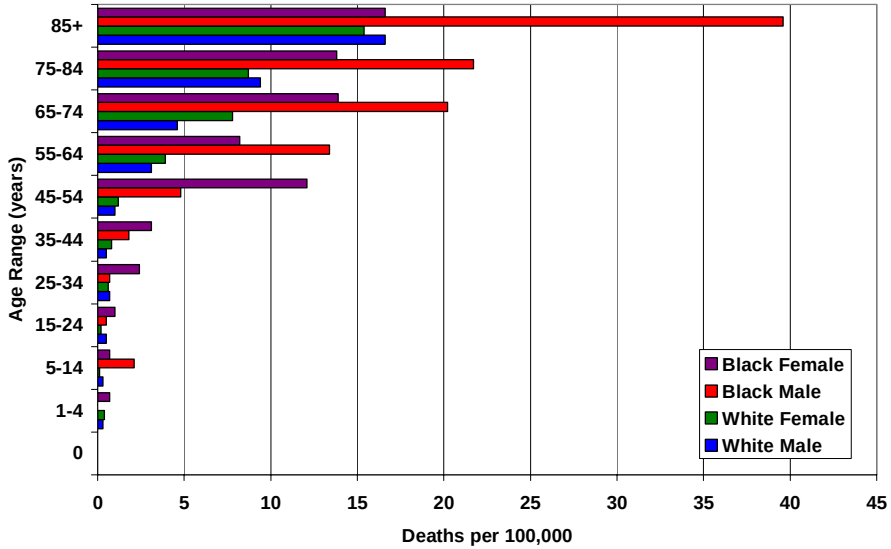
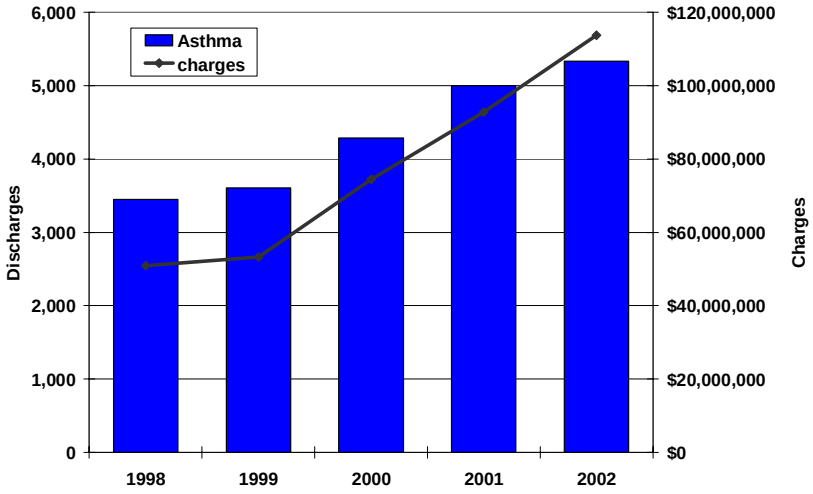


Figure 2: Mortality by Age, Race, and Sex, 1990-2000



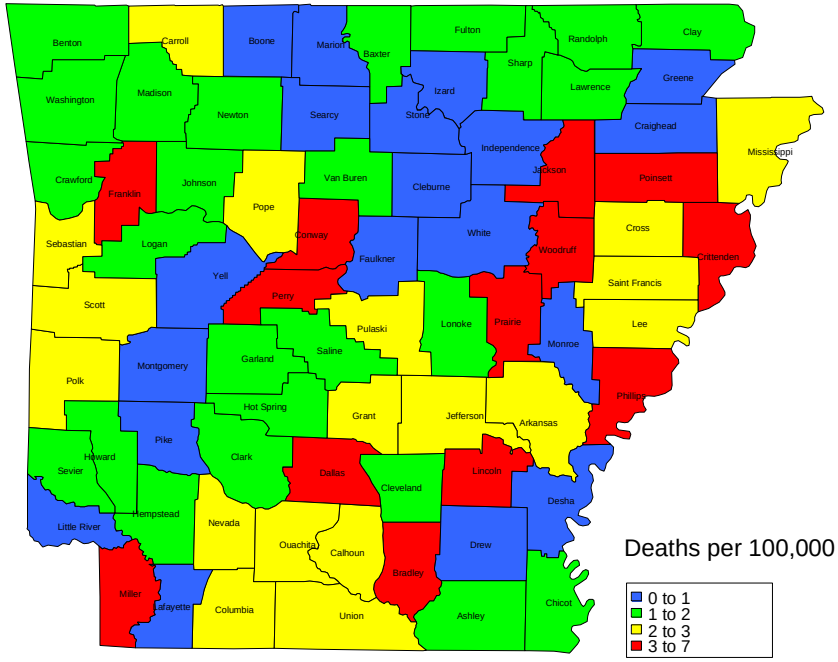
Source: Arkansas Department of Health, Division of Vital Statistics

Figure 3: Hospital Cases: Discharges and Charges



Source: Arkansas Department of Health, Hospital Discharge Database

Figure 4: Asthma Mortality by County, 1990-2000



State Average 2/100,000

Source: Arkansas Department of Health, Division of Vital Statistics

Section MH-14
HIV/AIDS

HIV, human immunodeficiency virus, works by killing or damaging cells of the body's immune system. AIDS, acquired immunodeficiency syndrome, is caused by HIV. HIV is spread most commonly by having unprotected sex with an infected partner but may also be spread through contact with infected blood, among intravenous drugs users, and during birth to a mother with HIV infection. The term AIDS refers to people with advanced HIV infection. People with AIDS may get life-threatening diseases known as opportunistic infections, which are caused by viruses or bacteria that usually do not make healthy people sick. Symptoms of HIV infection are: fever, headache, tiredness, and enlarged lymph nodes. Other symptoms may include weight loss, frequent fevers and sweats, frequent or persistent yeast infections, pelvic inflammatory disease in women, short-term memory loss, and skin rashes. The AIDS epidemic is growing most rapidly among minority populations and is a leading killer of African-American males aged 25–44.[47]

Nationally, in 2002, there were 42,745 new cases of AIDS. The largest number of cases per 100,000 was found in the African-American and Hispanic populations at 111.9 and 39.3, respectively.[48] Overall over the past 10 years, the death rate from HIV/AIDS has been declining. This is thought to be due to the development of drugs that treat HIV infection and drugs that fight opportunistic infections. These drugs, referred to as highly active antiretroviral therapy (HAART), while not curative, may decrease the amount of virus the blood. In 2001, the mortality rate from HIV/AIDS was 5.0/100,000. The age-adjusted death rate for African-American males was 33.8/100,000, and for African-American females, it was 13.4/100,000.

In Arkansas, the overall age-adjusted death rate for HIV/AIDS was lower than the national rate at 2.5/100,000. As with many causes of death, the African-American population has a greater burden than the White population. There has been a persistent increased mortality in African Americans. The death rate from 1990 to 2000 was 242% higher for Blacks than for Whites (**Figure 1**). Consistent with the rest of the nation, African-American men are greatly affected, especially those who are ages 24–44 (**Figure 2**). In 2002, there were over 500 discharges from Arkansas hospital due to HIV, with total charges of $12 million (**Figure 3**).

The counties with the highest age-adjusted HIV mortality rate are in the Delta region. These counties are Crittenden (12/100,000), Saint Francis (9.5/100,000), and Lee (8.9/100,000).

[47] National Institue of Allergy and Infectious Disease. HIV infection and AIDS: An Overview. October 2003.
[48] Health, United States, 2003 Table 53.

Age-Adjusted HIV/AIDS Mortality by Race, 1990–2000

Figure 1: Mortality by Race

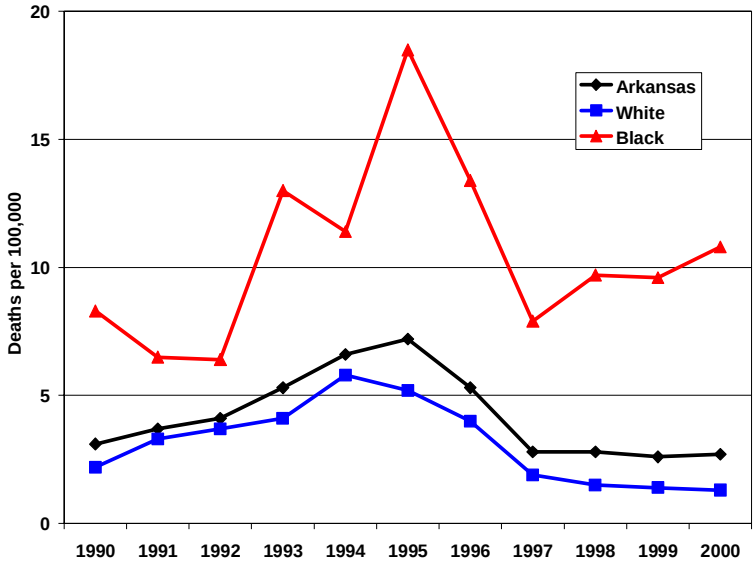
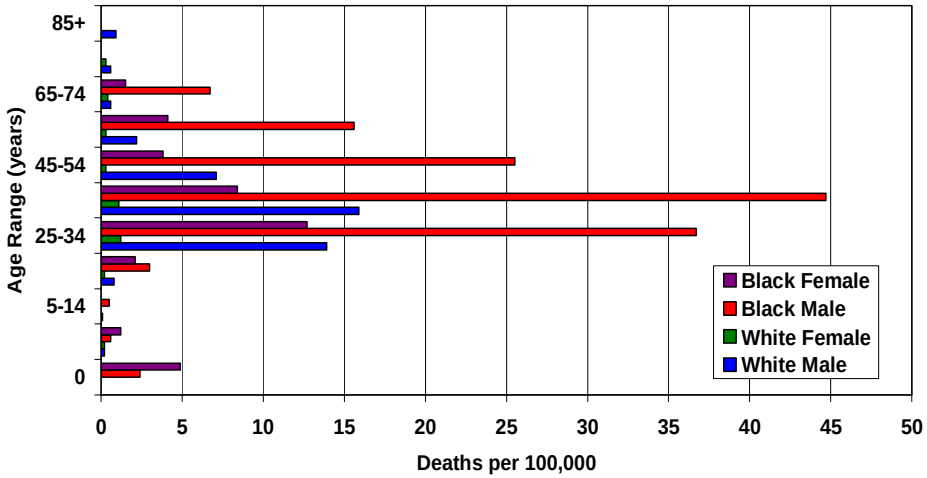
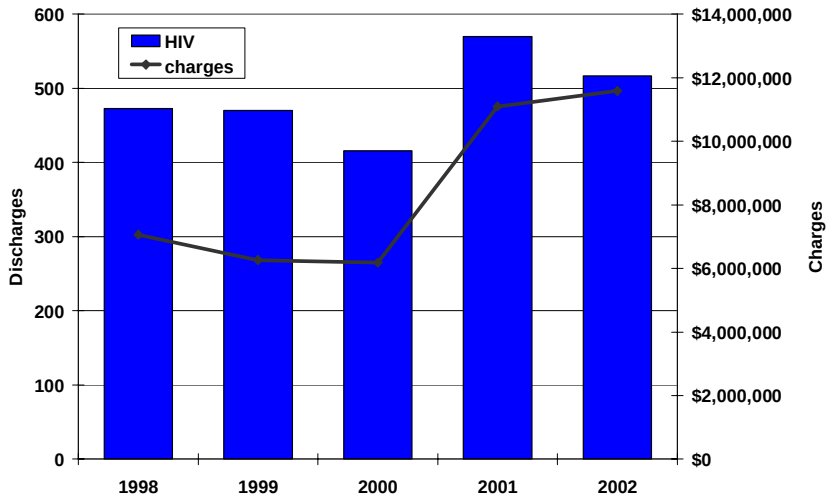


Figure 2: Mortality by Age, Race, and Sex, 1990-2000



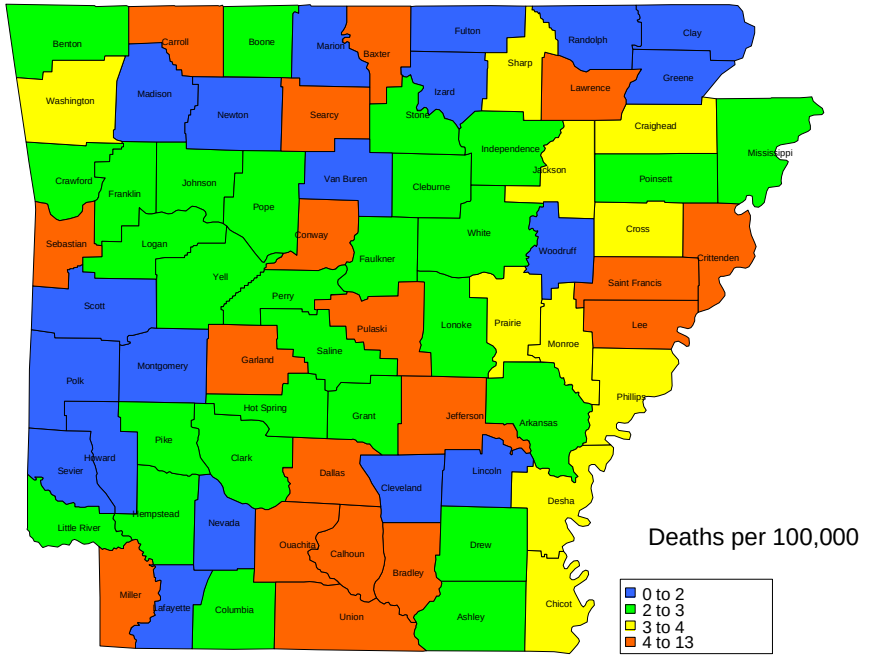
Source: Arkansas Department of Health, Division of Vital Statistics

Figure 3: Hospital Cases: Discharges and Charges



Source: Arkansas Department of Health, Hospital Discharge Database

Figure 4: HIV Mortality by County, 1990-2000



State Average 4/100,000

Source: Arkansas Department of Health, Division of Vital Statistics

Section MH-15
Homicide

Homicide is the leading cause of death among Blacks aged 15–34. Overall, homicide is the third leading cause of years of potential life lost for Blacks. Certain patterns of homicide mortality in the US were common to all racial and ethnic groups. Specifically, homicide rates were highest among males and young adults, and at least half of all victims were killed with firearms. Most homicides occurred during the course of an argument or other non-felony circumstance, and most victims knew their assailants. Approximately 1 in 3 female victims of homicide are killed by current or former spouses or boyfriends, a group collectively referred to as intimate partners. Among male homicide victims, 5% are killed by intimate partners.[49]

Nationally, homicide rates have decreased since 1990. However, homicides, and specifically firearm homicides, remain a leading cause of death. In 2001, it was the 13th leading cause of death in the US, and homicide has a disproportionate impact in minority communities. Homicide nationally is the sixth leading cause of death for African Americans. In 2001, the age-adjusted mortality rate for homicide was 7.1/100,000, up from 5.9/100,000 in 2000. The rate for African-American men was 36/100,000, and for African-American females, it was 7/100,000.

In 2001, Arkansas's homicide mortality rate was 6.9/100,000, close to the national rate. However, as for the nation, the mortality rate for African-Americans is higher.[50] The mortality rate for African Americans was 3 times higher at 20 deaths per 100,000. This disparity has been decreasing since 1994. From 1990 to 2000, African Americans have had almost a 500% increased homicide mortality rate (**Figure 1**). The African-American male population is most affected throughout the lifespan until the age of 85 (**Figure 2**). There are also growing numbers of hospital discharges and charges related to homicide. In 2002, there were over 300 discharges and $18 million in charges (**Figure 3**). The counties with the highest homicide age-adjusted mortality rates are in the southeastern half of the state. The counties with the highest mortality rates are Phillips (34/100,000), Crittenden (23/100,000), and Lee (23/100,000).

[49] Leonard J. Paulozzi, M.D., M.P.H [1]Linda E. Saltzman, Ph.D., M.S. [1]Martie P.Thompson, Ph.D.[1] Patricia Holmgreen, M.S.[2] Surveillance for Homicide Among Intimate Partners ---United States, 1981—1998.

[50] National Center for Injury Prevention and Control, Web-based Injury Statistics Query and Reporting System.

Age-Adjusted Homicide Mortality by Race, 1990–2000

Figure 1: Mortality by Race

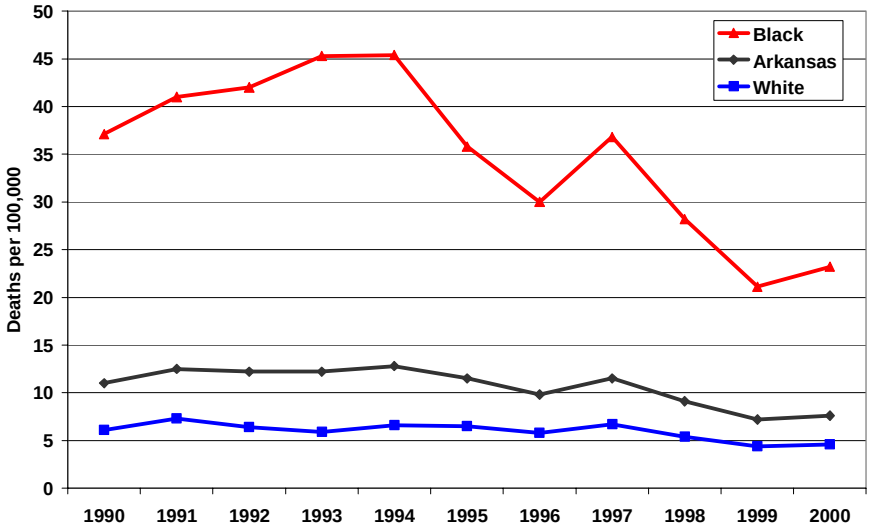
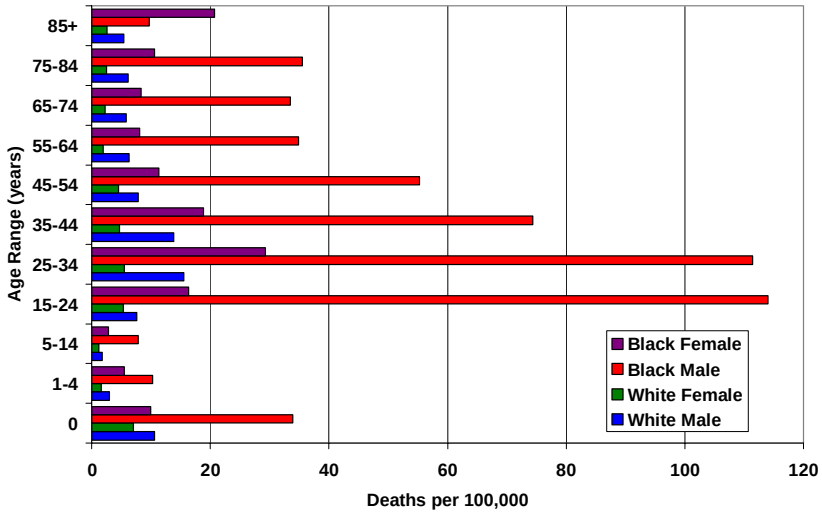
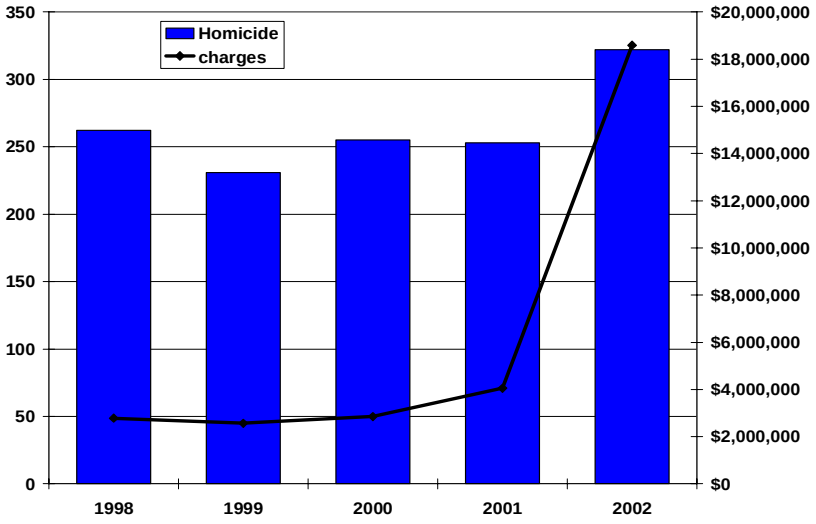


Figure 2: Mortality by Age, Race, and Sex, 1990-2000



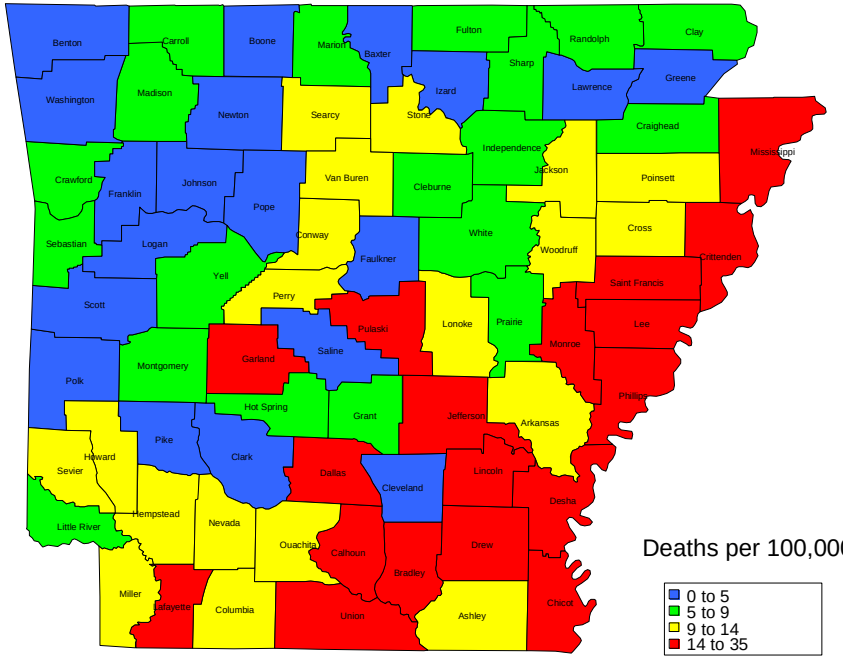
Source: Arkansas Department of Health, Division of Vital Statistics

Figure 3: Hospital Cases: Discharges and Charges



Source: Arkansas Department of Health, Hospital Discharge Database

Figure 4: Homicide Mortality by County, 1990-2000



State Average 11/100,000

Source: Arkansas Department of Health, Division of Vital Statistics

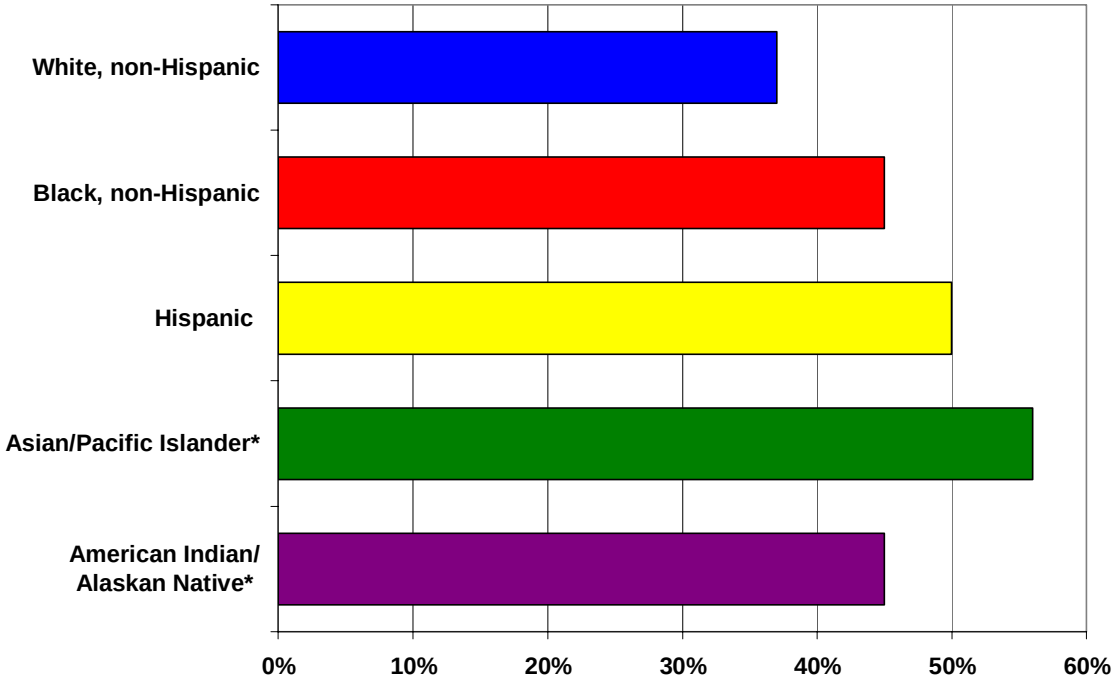
HEALTHCARE UTILIZATION

- **Chart HCU-1: "No, Never Had a Mammogram" by Race and Hispanic Origin, 1999-2001**
- **Chart HCU-2: "No, Never Had a Pap Smear" by Race and Hispanic Origin,1999-2001**
- **Chart HCU-3: "No, Have Not Had a Flu Shot in the Last 12 Months" by Race and Hispanic Origin,1999-2001**
- **Chart HCU-4: "No, Never Had Pneumovax" by Race and Hispanic Origin,1999-2001**
- **Chart HCU-5: "No, Never Had a Colon Exam" by Race and Hispanic Origin,1999-2001**
- **Chart HCU-6: "No, Never Had Cholesterol Checked" by Race and Hispanic Origin, 1999-2001**
- **Chart HCU-7: Women Not Receiving First Trimester Prenatal Care, 1996–1998**

Chart HCU-1

"No, Never Had a Mammogram" by Race and Hispanic Origin

- Minority women in Arkansas are less likely to have mammograms.
- 50% of Hispanics and 45% of Blacks have not had a mammogram. These rates decrease with access to insurance, but the disparity remains.



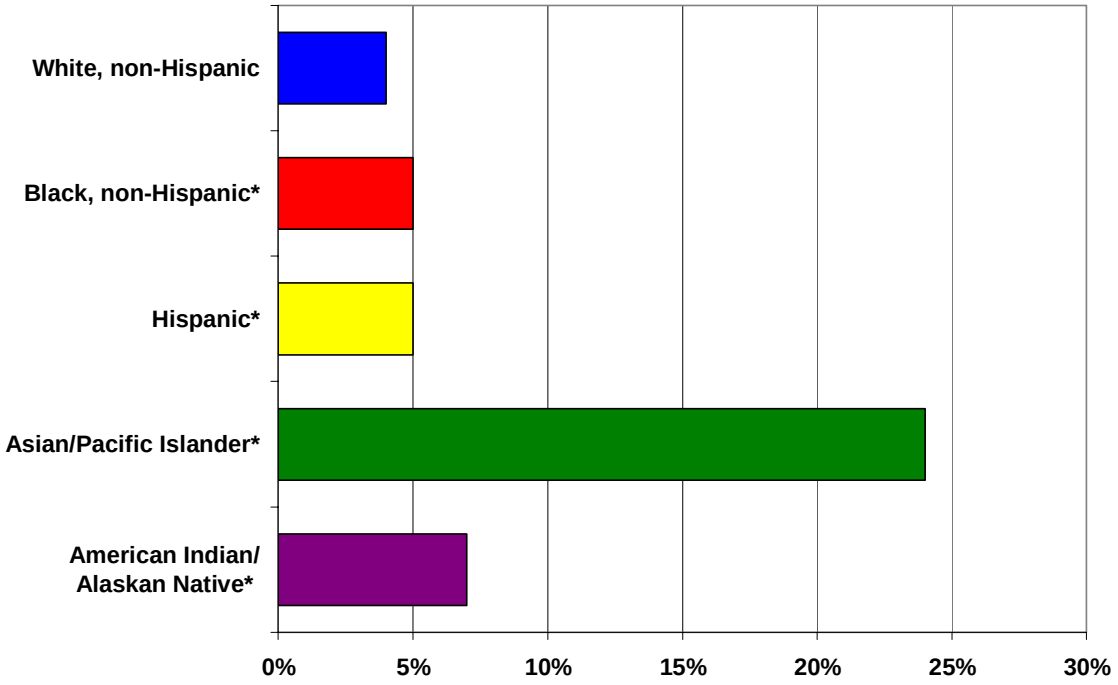
Source: BRFSS

** Estimates considered unreliable. These are based on less than 50 surveyed.*

Chart HCU-2

"No, Never Had a Pap Smear" by Race and Hispanic Origin

- Few White women report never having a pap smear. The interpretation for minority women is limited by small numbers of survey respondents.



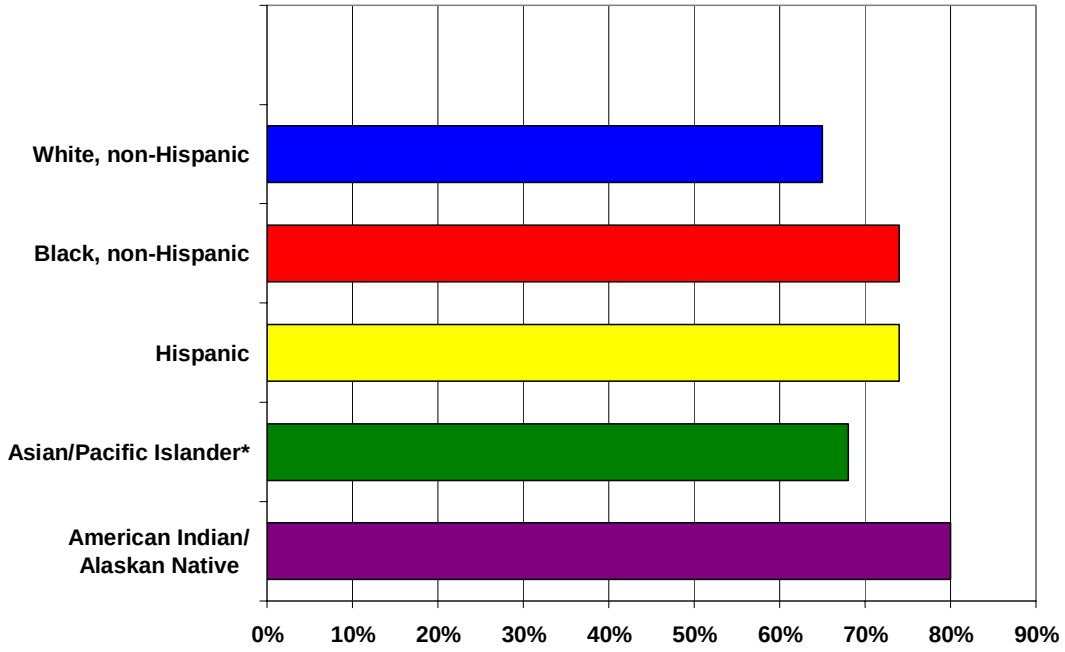
Source: BRFSS

** Estimates considered unreliable. These are based on less than 50 surveyed.*

Chart HCU-3

"No, Have Not Had a Flu Shot in the Last 12 Months" by Race and Hispanic Origin, 1999-2001

- Most Arkansans do not get flu shots. Over 60% did not receive the vaccine in the past 12 months. Minorities are the least likely to utilize flu vaccinations.
- Health insurance status did not change the rates of use.



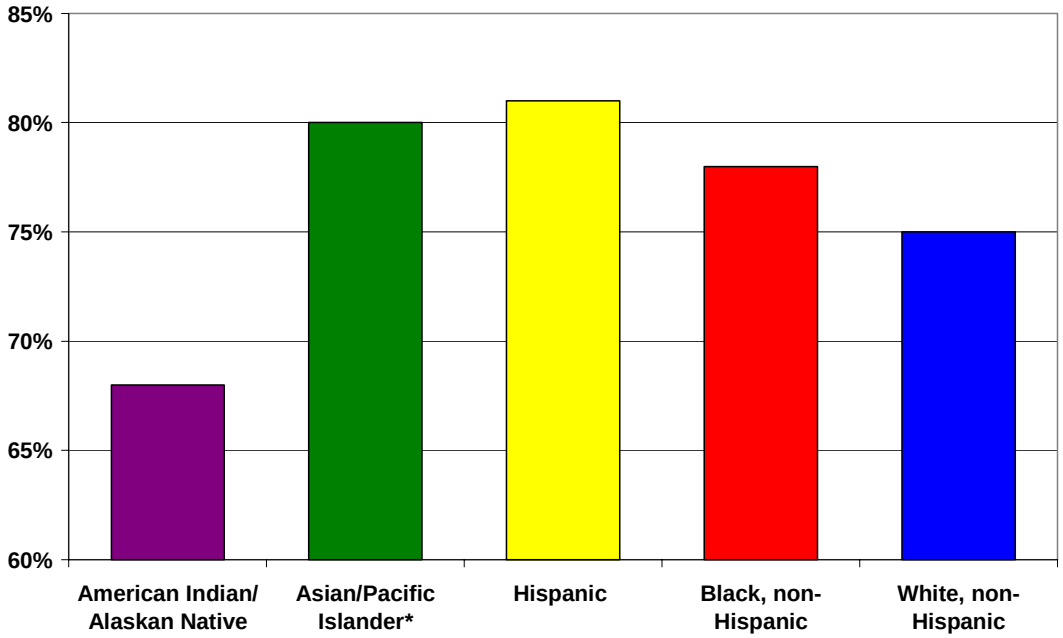
Source: BRFSS

** Estimates considered unreliable. These are based on less than 50 surveyed.*

Chart HCU-4

"No, Never Had Pneumovax" by Race and Hispanic Origin

- Pneumovax is a vaccine that protects against a bacterium that causes pneumonia.
- Few Arkansans have ever had the vaccine.
- Even with insurance, 70%–85% across racial and ethnic groups have not received this recommended vaccine.



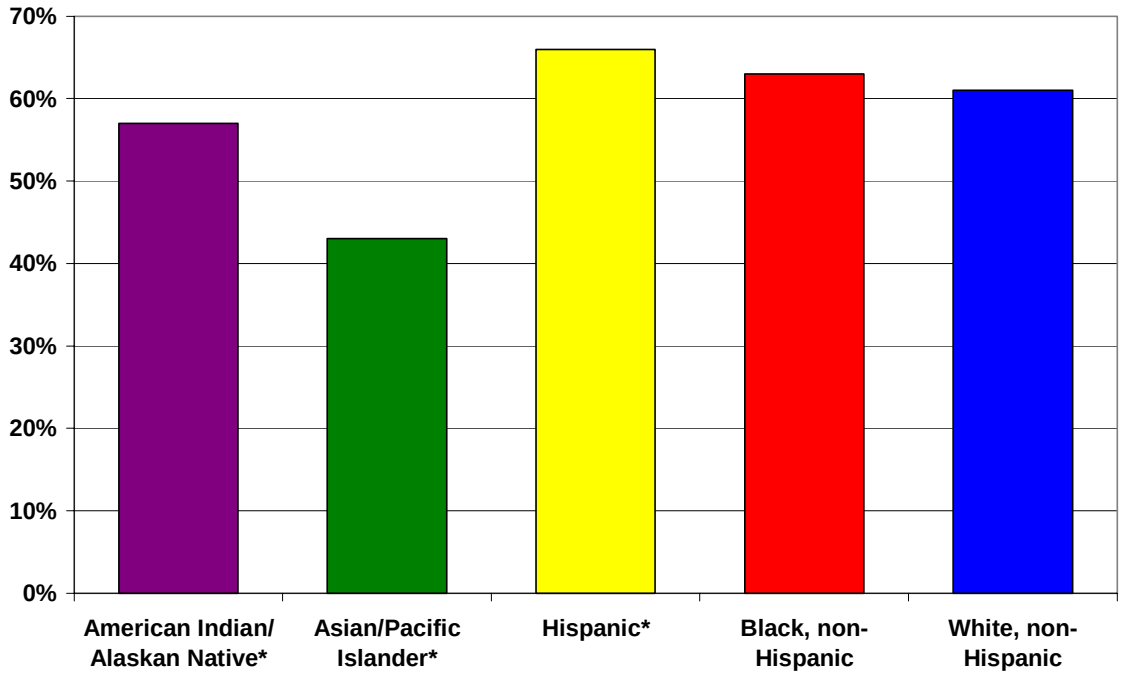
Source: BRFSS

** Estimates considered unreliable. These are based on less than 50 surveyed.*

Chart HCU-5

"No, Never Had a Colon Exam" by Race and Hispanic Origin

- A colon exam (colonoscopy) is used to detect pre-cancerous growths in the colon.
- More then 60% of the population has not had a colon exam irrespective of insurance status.



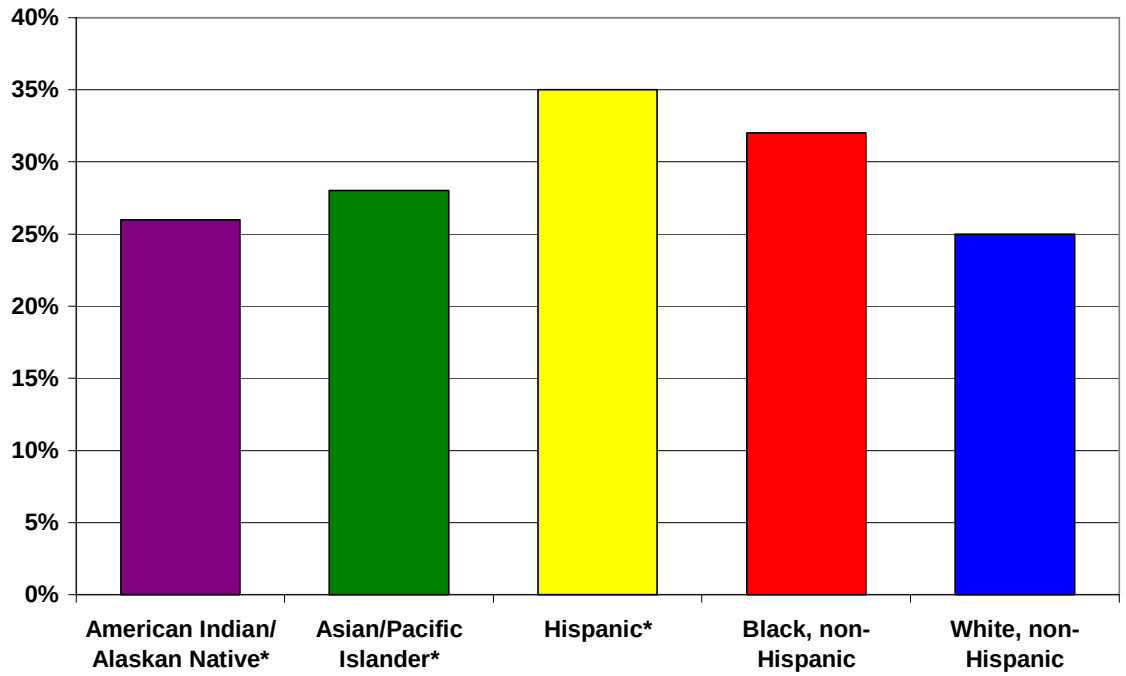
Source: BRFSS

** Estimates considered unreliable. These are based on less than 50 surveyed.*

Chart HCU-6

"No, Never Had Cholesterol Checked" by Race and Hispanic Origin

- High blood cholesterol is one of the major risk factors for heart disease.
- 1/4 of Whites and1/3 of African-Americans have not had a cholesterol check.
- African Americans are least likely to have cholesterol checks, even with health insurance.



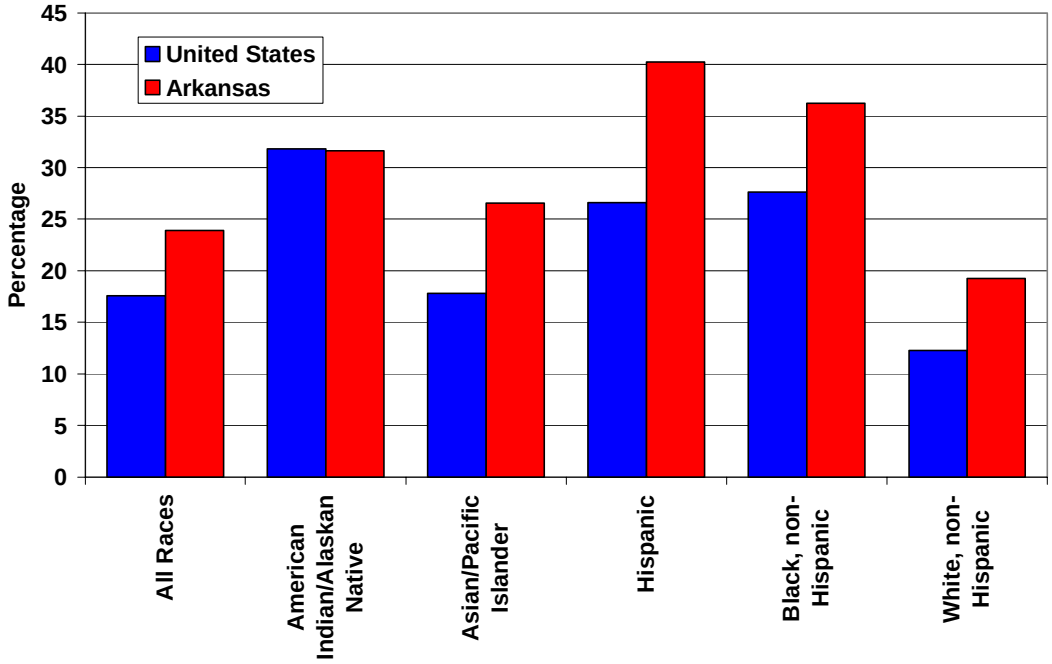
Source: BRFSS

** Estimates considered unreliable. These are based on less than 50 surveyed.*

Chart HCU-7

Women Not Receiving First Trimester Prenatal Care, 1996–1998

- 24% of women in Arkansas did not receive prenatal care in the first trimester compared to 16% nationally.
- Hispanics, Blacks, and American Indians are the least likely to receive first trimester prenatal care.



Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, Birthfile.

HEALTHCARE WORKFORCE PROFILE

- **Chart HCW-1: Healthcare Professionals by Public Health Region, 2001**
- **Chart HCW-2: Total Arkansas Physicians, 2001**
- **Chart HCW-3: Primary Care Physicians, 2001**
- **Chart HCW-4: Total Nurses, 2001**
- **Chart HCW-5: Dentists, 2001**
- **Chart HCW-6: College of Medicine Faculty and Students, 2002–2003**
- **Chart HCW-7: College of Medicine Faculty Growth**
- **Chart HCW-8: College of Health-Related Professions Faculty and Students, 2002**
- **Chart HCW-9: College of Nursing Faculty and Students, 2001–2002**
- **Chart HCW-10: College of Pharmacy Faculty and Students, 2002**
- **Chart HCW-11: College of Public Health Faculty and Students, 2002**
- **Chart HCW-12: Graduate School Students, 2002–2003**

OVERVIEW

The healthcare workforce is a critical contributor to the health and healthcare of a community. This workforce is at the front line of ensuring that good health is obtainable and that high quality, cost effective care is available when needed. Therefore, the workforce must not only be well trained in many aspects of community and individual health, but it must also be distributed in the community in such a way as to ensure the health of all people.

Many Arkansans live in Medically Underserved Areas (MUAs) and Health Professional Shortage Areas (HPSAs). These areas may have shortages of primary medical, dental, or mental health providers and may consist of urban or rural areas. MUAs may include a whole county or a group of contiguous counties, a group of county or civil divisions, or a group of urban census tracts in which residents have a shortage of personal health services. More than half (58%) of the state's population live in areas designated as MUAs. Some part of 71 counties in the state are designated as MUAs, and 58 counties (77%) are wholly designated as MUAs, indicating that 100% of the residents in those counties have limited access to medical care of all types.[51]

The HPSA criteria require three basic determinations:(1) the geographic area involved must be rational for the delivery of health services, (2) a specified population-to-practitioner ratio representing shortage must be exceeded within the area, and (3) resources in contiguous areas must be shown to be over-utilized, excessively distant, or otherwise inaccessible. At least some portion of 48 of Arkansas' 75 counties is designated as a HPSA.

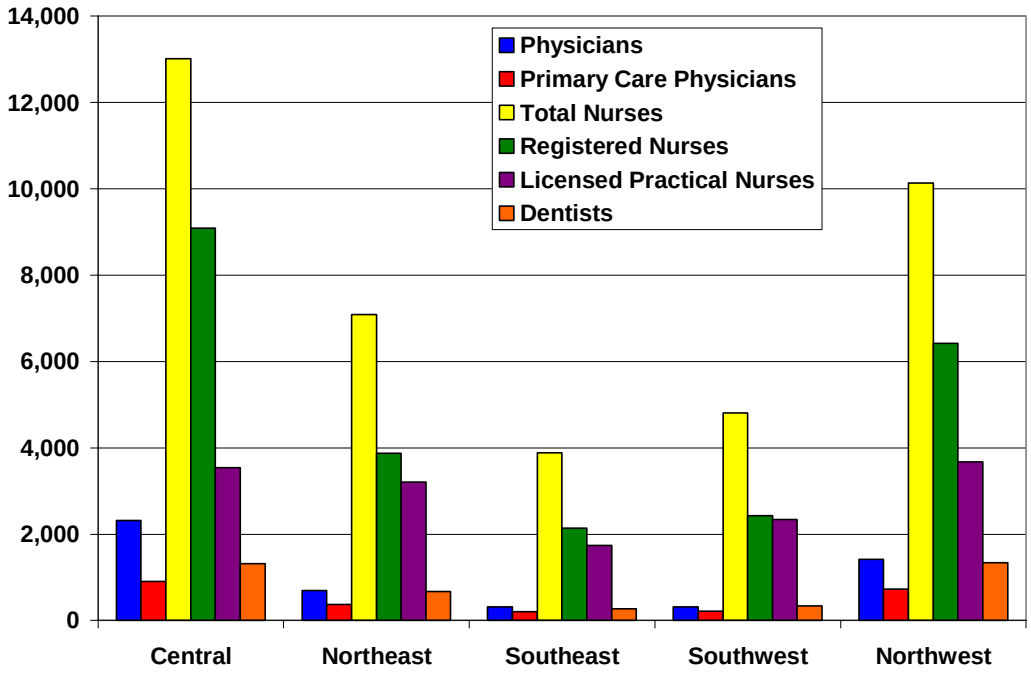
The following charts will show healthcare provider to population ratios in each public health region. The base population of these regions is that determined by Census 2000. Additionally, the workforce-in-training will also be shown for the state's major health professions training institution, the University of Arkansas for Medical Sciences. The faculty of each college within the UAMS system will also be shown by race and Hispanic origin.

[51] Phillips MM, and Balamurugan A, The Burden of Diabetes in Arkansas: Surveillence Report.

Chart HCW-1

Arkansas Healthcare Professionals by Public Health Region, 2001

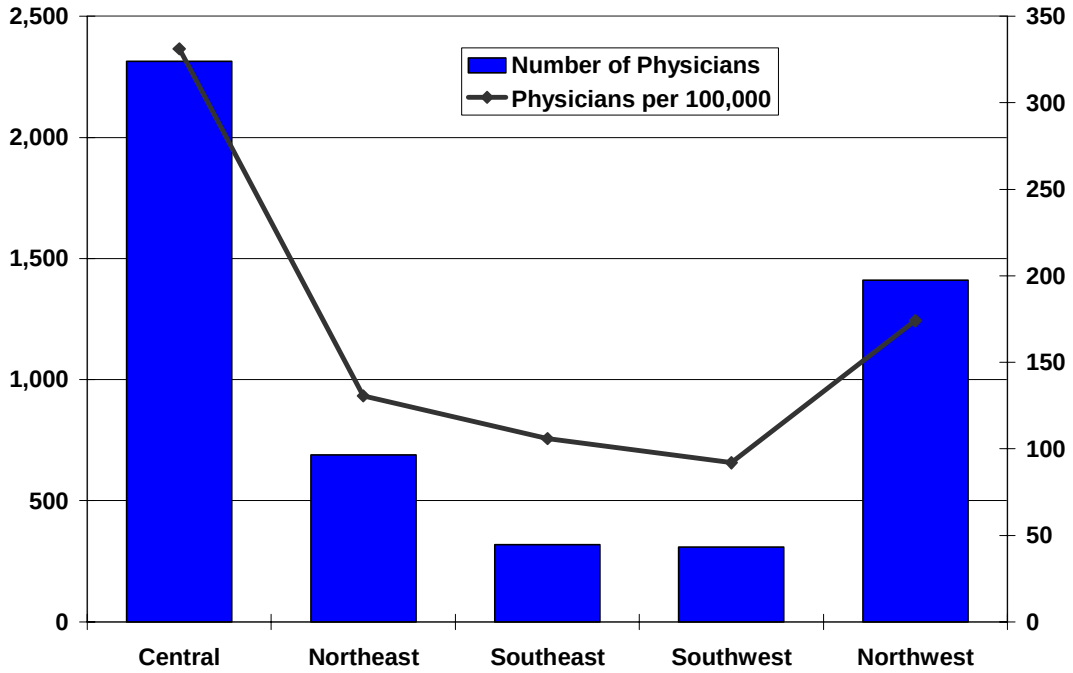
- Most healthcare professionals are found in the Central and Northwest Public Health Regions, the most heavily populated areas.
- The fewest healthcare providers in number are in the Southeast and Southwest Public Health Regions.



Source: Arkansas Department of Health. Health Professions Licensing Survey, 2001

Chart HCW-2
Total Physicians, 2001

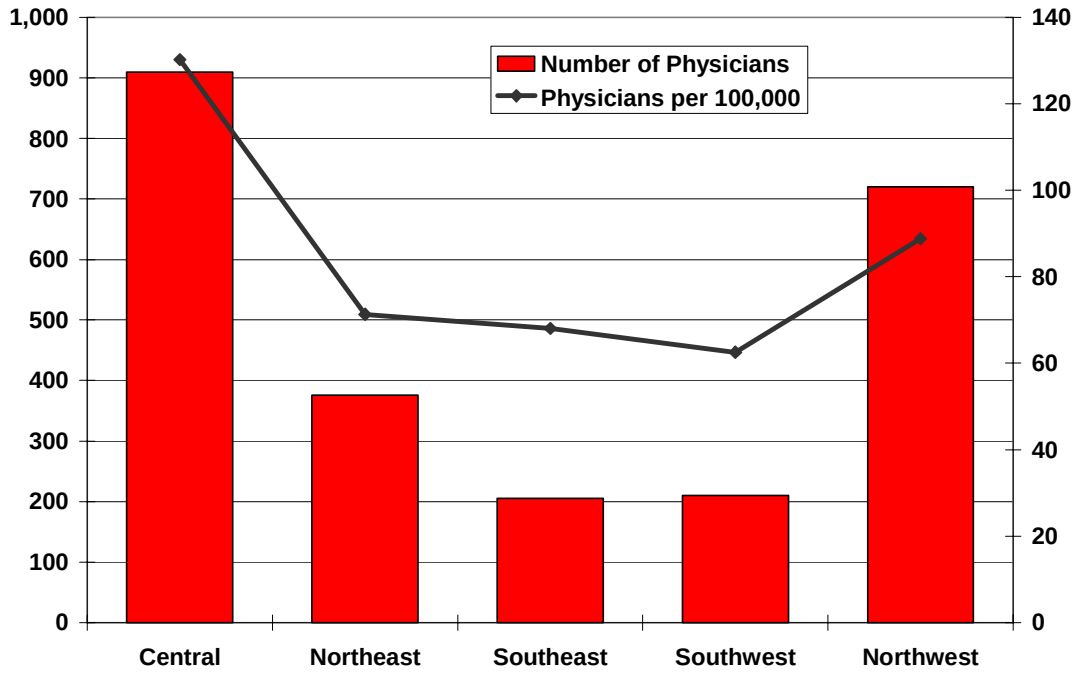
- The US had a national ratio of 272 physicians per 100,000 population in 2002.
- Arkansas's physician ratio was 180 per 100,000 population in 2001 and 202 per 100,000 in 2002.
- The Southeast and Southwest Public Health Regions have the lowest ratios.
- 2.2% of all physicians are African-American, 1.2% of all are Hispanic, 4.6% of all are Asian/Pacific Islander, and 0.1% of all are American Indian/Alaskan Native.



Sources: Arkansas Department of Health. Health Professions Licensing Survey, 2001
Kaiser Family Foundation State Health Facts Online: http://www.statehealthfacts.kff.org.

Chart HCW-3
Primary Care Physicians, 2001

- Primary care physicians (PCPs) are internists, pediatricians, or family physicians. They provide general medical care to patients.
- The fewest PCPs per population are in the Northeast, Southeast and Southwest Public Health Regions.

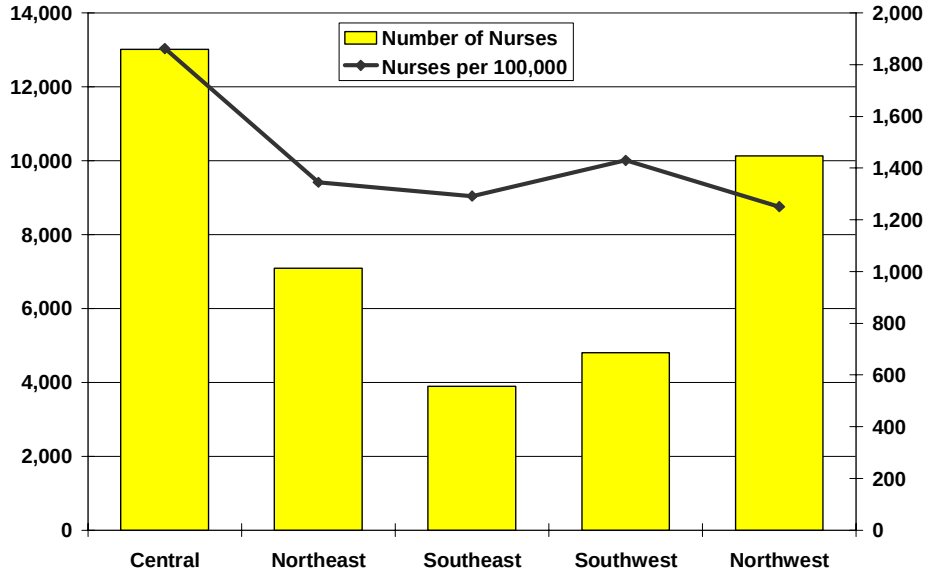


Source: Arkansas Department of Health. Health Professions Licensing Survey, 2001

Chart HCW-4
Nurses

- There were 38,932 nurses in 2001.
- The highest proportion of nurses per population is in the Central and Southwest Public Health Regions.
- RNs are concentrated in the Central Region, while LPNs are in the Southwest Public Health Region.

Figure 1: Total Nurses



Source: Arkansas Department of Health. Health Professions Licensing Survey, 2001

Figure 2: Registered Nurses

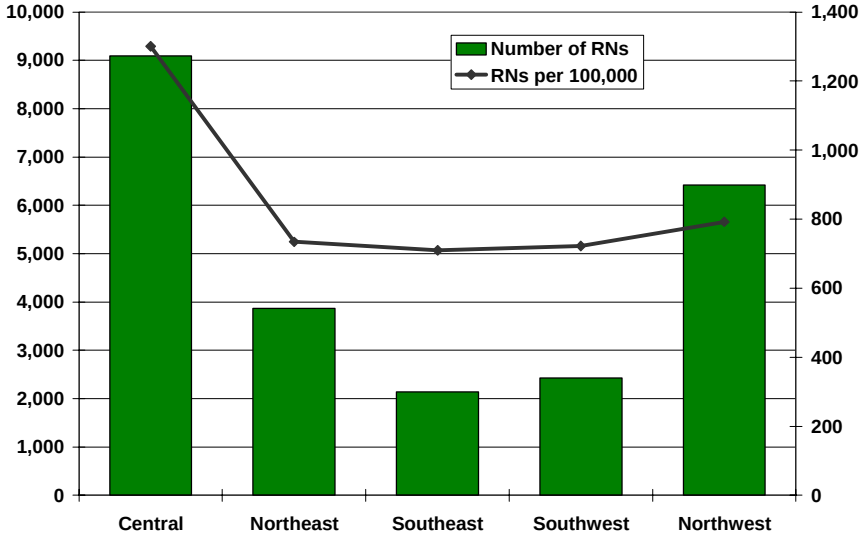
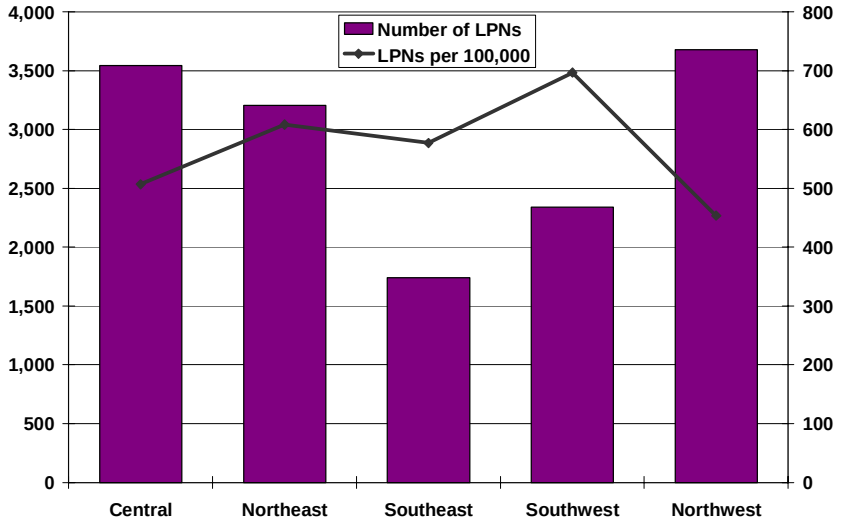


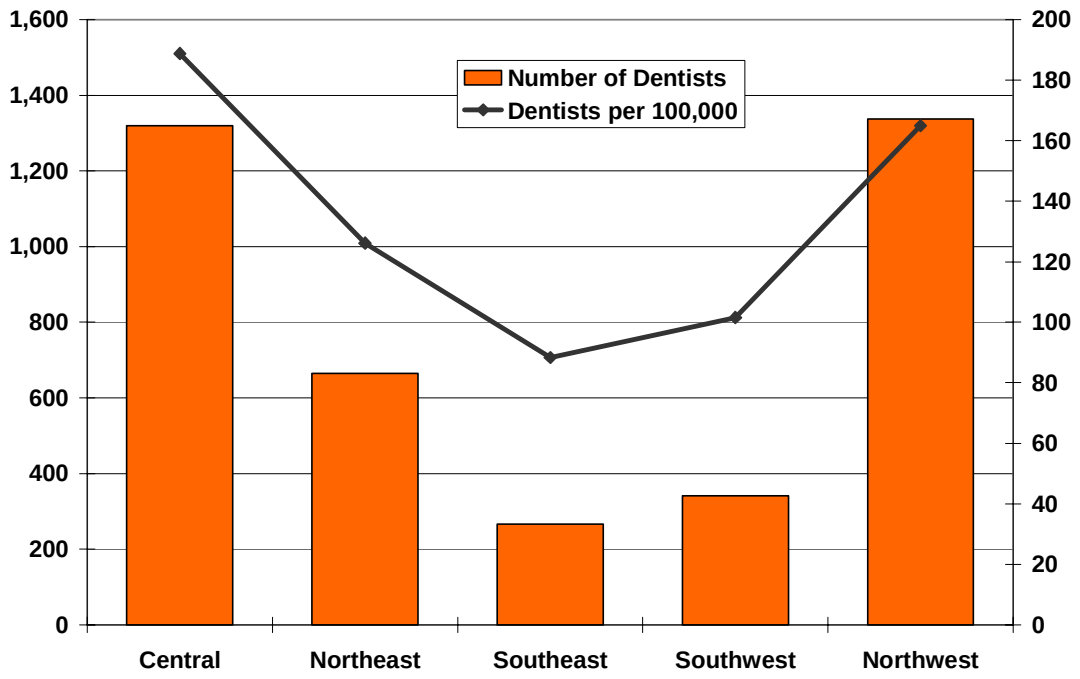
Figure 3: Licensed Practical Nurses



Source: Arkansas Department of Health. Health Professions Licensing Survey, 2001

Chart HCW-5
Dentists

- There were 3,928 dentists in 2001.
- Dentists are most likely to be located in the Central or Northwest Regions.
- The fewest dentists in number and proportion are in the Southeast Public Health Region.



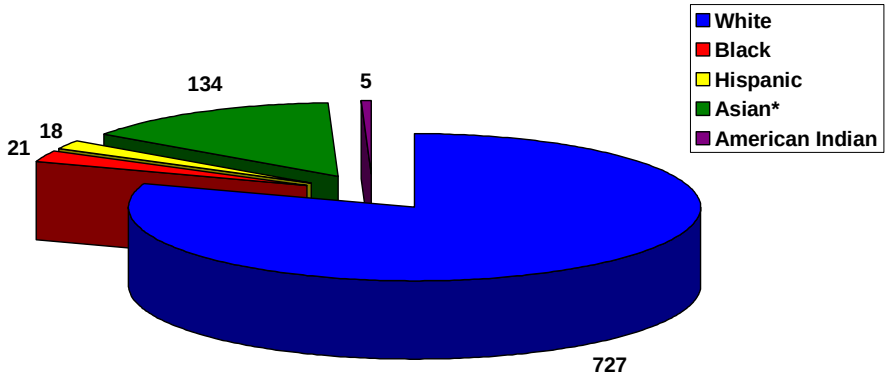
Source: Arkansas Department of Health. Health Professions Licensing Survey, 2001

Chart HCW-6

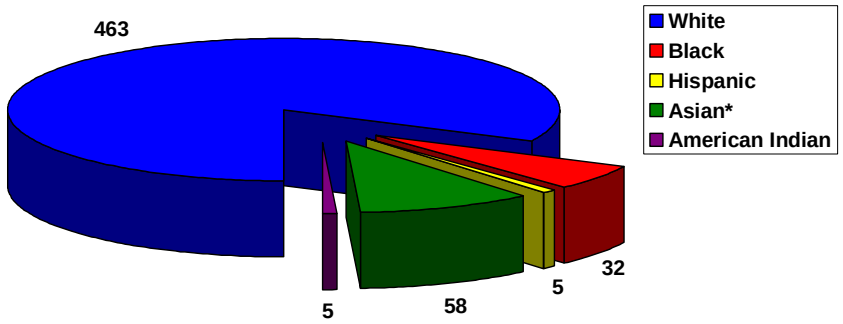
UAMS College of Medicine Faculty and Students, 2002–2003

- There are 905 full-time faculty members in the UAMS College of Medicine, the state's only medical school.
- 44 (about 5%) of the faculty and 42 (or 7%) of the students belong to underrepresented minority groups. In 1994, 10% of the student body was African-American.

Full-Time Faculty with Primary Appointments



Student Enrollment



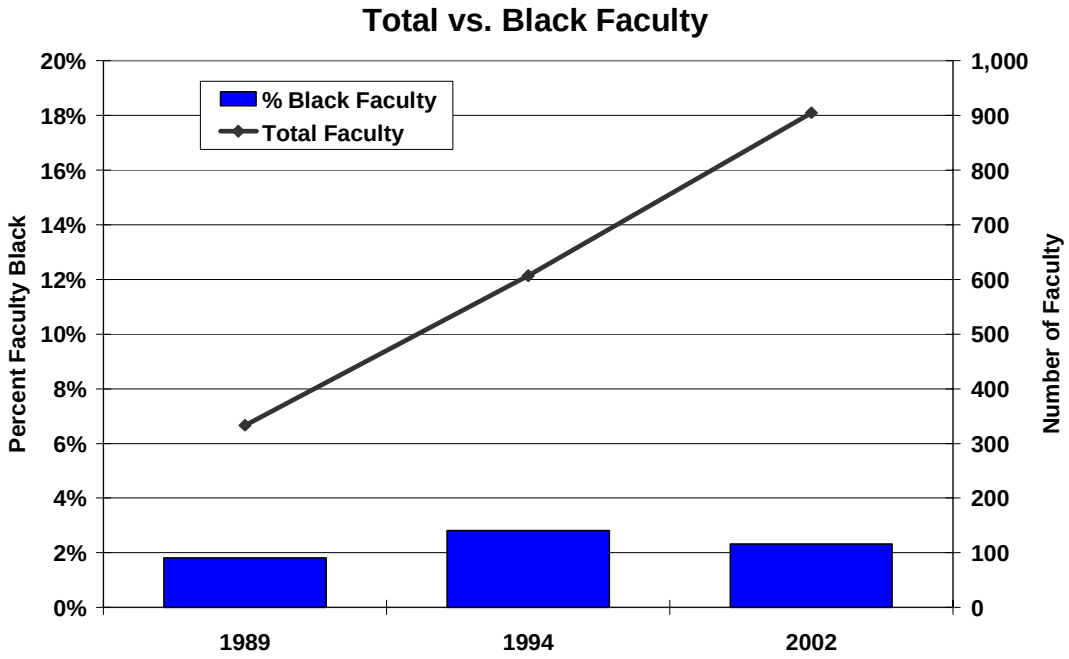
**Asians are not considered to be under-represented minorities in Medicine by the American Association of Medical Colleges.*

Sources: UAMS Faculty Information Tracking System, "UAMS Desegregation and the recruitment of African Americans, other minorities, and females progress report" 2001-2002 and 2000-2001 versions, "Affirmative action five year (1994-99) plan" November 1994, UAMS College of Medicine Office of Minortiy Affairs slide presentation.

Chart HCW-7

UAMS College of Medicine Faculty Growth, 1989–2002

- The faculty in the UAMS College of Medicine has nearly tripled in size from 1989 to 2002.
- Over this 13-year period, the percentage of African-American faculty has remained around 2%. African Americans make up 15.7% of the state's population. Data on Hispanic origin is unavailable prior to 1999.

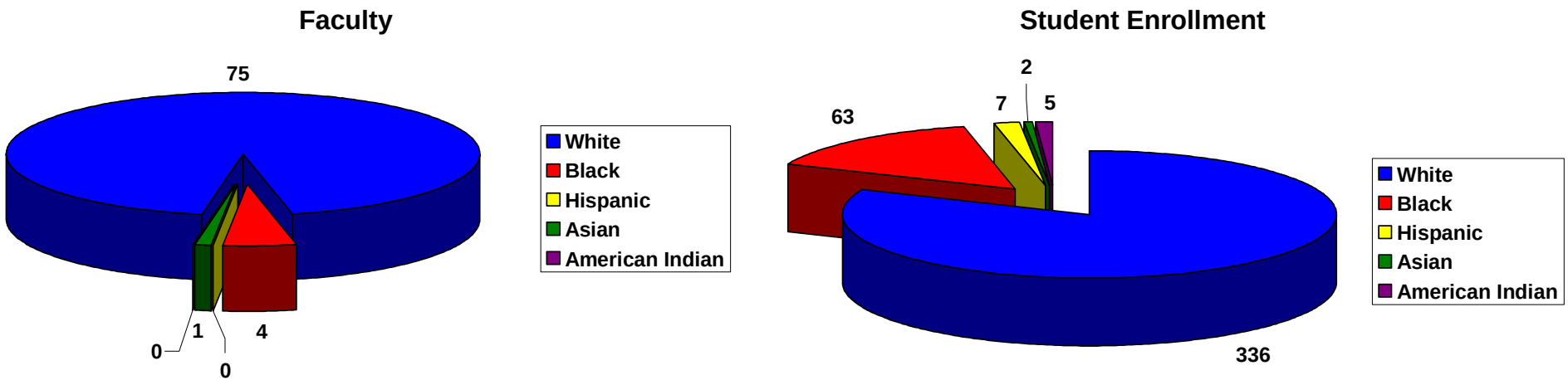


Sources: UAMS Faculty Information Tracking System, "UAMS Desegregation and the recruitment of African Americans, other minorities, and females progress report" 2001-2002 and 2000-2001 versions, "Affirmative action five year (1994-99) plan" November 1994, UAMS College of Medicine Office of Minority Affairs slide presentation.

Chart HCW-8

UAMS College of Health Related Professions Faculty and Students, 2002

- There are 80 faculty in the College of Health Related Professions.
- 6% of the faculty members are minorities. There are 1 Asian and 4 Black faculty members.
- There are 18% minority students.



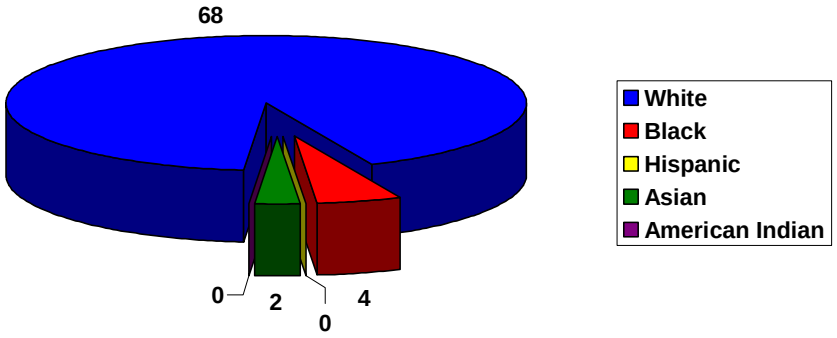
"UAMS Desegregation and the recruitment of African Americans, other minorities, and females progress report" 2001-2002 and 2000-2001

Chart HCW-9

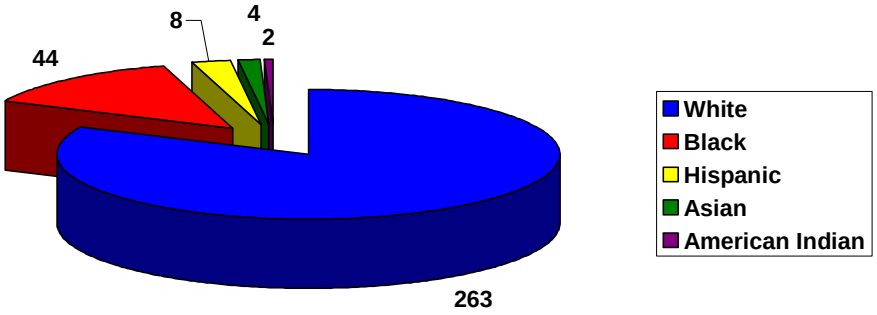
UAMS College of Nursing Faculty and Students, 2001–2002

- There are 74 full- or part-time faculty in the College of Nursing. There are 4 Black and 2 Asian faculty members (8%).
- In the Graduate and Undergraduate Student population, there are 17% minorities.

Full-Time and Part-Time Faculty



Undergraduate and Graduate Student Enrollment



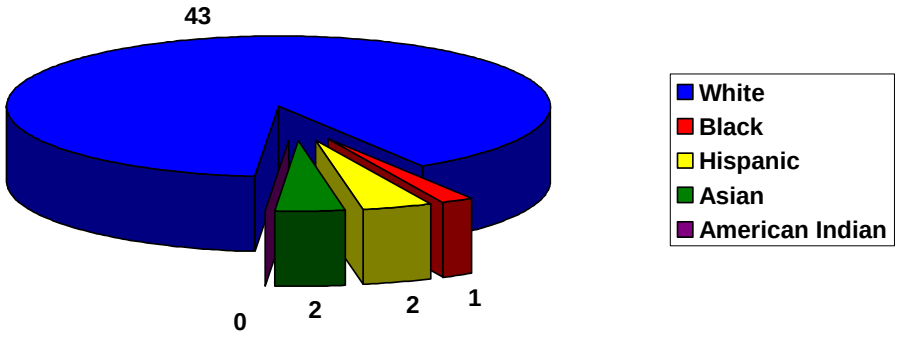
"UAMS Desegregation and the recruitment of African Americans, other minorities, and females progress report" 2001-2002 and 2000-2001

Chart HCW-10

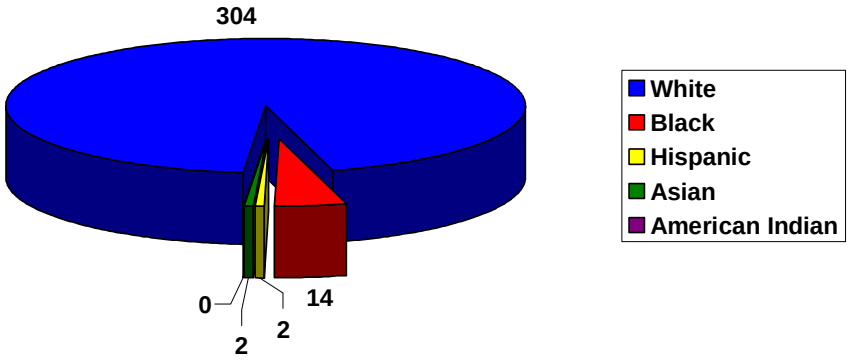
UAMS College of Pharmacy Faculty and Students, 2002

- The College of Pharmacy has a total of 48 faculty. Only 5 (or 10%) are minorities.
- 6% of the Pharmacy students are minorities.

Faculty



Student Enrollment



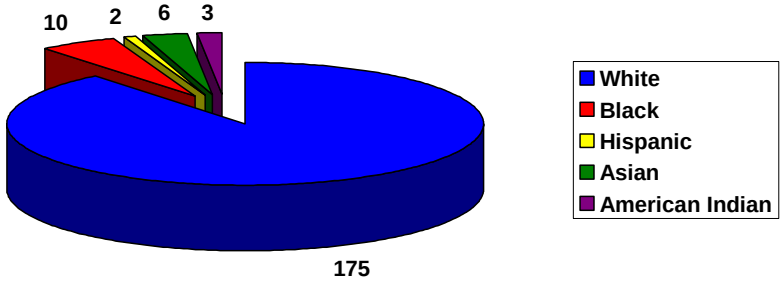
"UAMS Desegregation and the recruitment of African Americans, other minorities, and females progress report" 2001-2002 and 2000-2001

Chart HCW-11

UAMS College of Public Health Faculty and Students, 2002

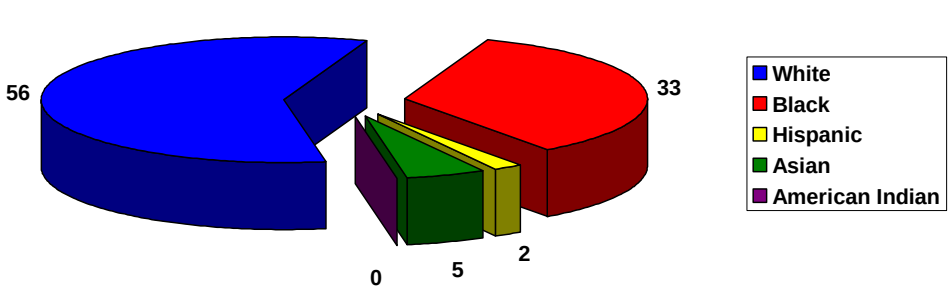
- The College of Public Health, the newest college on campus, has 7% underrepresented minorities.
- Its student enrollment consists of 36% underrepresented minorities.

Faculty



Includes all faculty with primary, secondary and other appointments

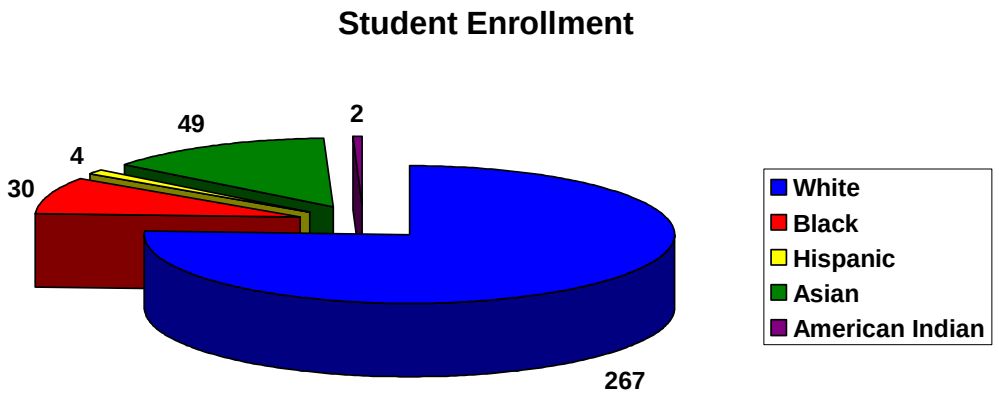
Student Enrollment



"UAMS Desegregation and the recruitment of African Americans, other minorities, and females progress report" 2001-2002 and 2000-2001

Chart HCW-12
UAMS Graduate School Students, 2002–2003

- The Graduate School has an enrollment of 352 students.
- 9% are Black, while less than 2% are Hispanic or American Indian.
- 14% of the students are Asian, and 76% are White.



"UAMS Desegregation and the recruitment of African Americans, other minorities, and females progress report" 2001-2002 and 2000-2001

COMMUNITY VOICES

Focus Group Findings

INTRODUCTION

Statistical data are an important component of defining and understanding health disparities but do not adequately describe what people in communities experience in their search for good health. The documentation of conversations with minority Arkansans statewide enriches the data that describe outcomes and risk factors and completes the picture of health and healthcare disparities. As an old Jewish Proverb asks: "What is truer than the truth?" the answer: "The story."

Phase II of the Arkansas Racial and Ethnic Health Disparity Study includes a series of 15 focus groups conducted across the state in each of the public health regions. Each group consisted of on average 8-10 persons and was race specific. One key informant interview was conducted via telephone with two Native American participants. All of these discussions began with participants describing their perceptions of health, sources of health information, individual and community health concerns and activities engaged in to stay healthy. The discussions then touched on access to care issues, community health issues and prior experiences with the healthcare system. These conversations were audio and video taped, transcribed, translated and analyzed for thematic content.

Participants were recruited to express their "concerns on health" via print and radio advertising; direct contact, and mass appeals in churches, places of business and social gatherings. Incentives were given to each participant at the conclusion of the group and a meal was offered to encourage participation. Groups were held in community settings: public library meeting rooms, hospital meeting rooms, churches and other community locations. One Caucasian group was cancelled due to inability to recruit sufficient participants, two other groups had less than 5 participants, and overflow crowds were experienced in two locations. In most cases the focus group moderator was of the same race or ethnicity as the discussants and the Hispanic groups were conducted in Spanish.

Demographic information was collected from the focus group participants (**Table 2**). There were a total of 148 group members across the state. Of the 15 focus groups conducted, 1 was with Asians, 3 were with Caucasians, 4 were with Hispanics and 7 were with African Americans. Two-thirds of participants were female and 60% were between the ages of 31 and 60. The education level was varied and half the participants earned less than $20,000 a year. One in five participants had

no health insurance and more than one-third had coverage as a result of their employment. More than 70% of the discussants rated their health status as “excellent” or “good”.

Gender	**Male (40)**	**Female (108)**	**No answer (0)**						
Age**	**18-20 yrs. (6)**	**21-30 yrs. (24)**	**31-40 yrs. (27)**	**41-50 yrs. (34)**	**51-60 yrs. (27)**	**61-70 yrs. (20)**	**71-75 yrs. (5)**	**Other (1)**	
Race and Hispanic Origin**	**White (25)**	**Black (86)**	**Hispanic (25)**	**Asian (9)**	**AI/AN (0)**	**Pacific Islander (0)**	**Other (0)**		
Education	**GED (15)**	**HS (53)**	**BS (41)**	**Graduate (22)**	**Other (5)**	**No answer (12)**			
Income**	**<20K (72)**	**20-30K (17)**	**30-40K (25)**	**40-50K (6)**	**50-60K (5)**	**60-70K (4)**	**>70K (3)**	**No answer (13)**	
Insurance*	**Employer (51)**	**Private (20)**	**Medicaid (14)**	**Medicare (25)**	**Military (9)**	**Secondary (1)**	**Other (5)**	**None (34)**	**No answer (6)**
Health**	**Excellent (24)**	**Good (79)**	**Fair (37)**	**Poor (3)**	**No answer (2)**				

*Some participants gave multiples answers

**Some participants gave no answer

EMERGENT THEMES

Setting of the Thermostat for Health: Frame of Reference in the Community

Each focus group began with several methods designed to introduce participants to each other, the moderator, facilitator and staff. Questions were designed to get people ready to discuss their personal experiences with health and the healthcare system. Across all the groups, when asked to define health, people were able to identify habits and lifestyles that were likely to keep a person healthy. That is, people knew the importance of exercise, a healthy diet, avoiding risky behaviors such as the use of tobacco products, and regular visits to the doctor for check-ups and detection of diseases. Participants were able to describe a healthy person, and frequently did so in terms of physical health, mental health, absence of stress and properness

of attitude. Most minority groups mentioned a spiritual component when describing someone in good health. A Latina in a Central county summed it up this way:

> "En lo físico, mental, espiritual…sería, tendrían que estar bien en todas esas tres partes para sentirse bien, ¿verdad? Y lo físico pues es todo el cuerpo, todo." (In what is physical, mental, and spiritual...they would have to be well in all three parts to feel well, right? And the physical is the whole body, all of it.)

Although most discussants mentioned the importance of routine visits to a doctor, mention was made of several sources other than doctors for health information. These sources included family members, community members, the Internet, church members and non-medical health providers and were usually turned to first before seeking the advice of a doctor. Even though group members were aware of the connection between personal decisions or behaviors and health, many admitted it was difficult to always do the right thing. As a Latina woman in a Northern county responded when asked if it was easy or difficult to stay healthy:

> Difícil, yo pienso que es difícil porque primero de todo hay muchas, como se dice… McDonalds, Taco Bell todo eso. En vez de llegar a su casa uno y hacerse una comida sana, uno va a comer comidas rápidas que a veces contienen mucha grasa, mucho colesterol o sea mucho que no debemos de comer y de todos modos lo comemos. Así que yo pienso en mi opinión personal, yo no estoy haciendo tanto lo que debería de hacer para cuidad mi salud. (Hard, I think it's hard because first of all there are many, how do you say, McDonalds, Taco Bell, all that. Instead of getting home and making a healthy meal, you go to eat fast foods that sometimes have lots of fat, cholesterol or something we shouldn't be eating, and we eat it anyway. So I think in my personal opinion, I'm not doing everything I should be doing to care for my health.)

An African American man in the Delta mentioned the influence of cost in his decision to buy a healthy food:

> But the system has something crazy for you. Yeah, I buy them grapes when they're 99 cents a pound, 99 cents a pound at Kroger. But I eat plenty of them. They're 99 cents this week. So when them grapes go back up to $1.79 I'm not going to pick up no more grapes. Just be honest.

In most groups, good health was defined in terms of functionality. People, who were able to work, go to school, care for their families and participate in daily activities, considered themselves to be healthy, in spite of having one or several chronic diseases. However, these individuals understood that what they thought was good health needed attention, as stated by this African American male in a central county:

> Let me say this. I've noticed quite a few people here who had heart attacks, strokes and other health problems and they died and they were considered healthy, but it was just something that just happened. You can think you are healthy, but you just never know when it's going to happen. So when you know that there may be some problem or some problem have occurred, and you take medication

for this problem and you continue to have this problem checked on, it means you are considered to be in good health, but you still have to have some help.

When asked to list specific health concerns, participants most often mentioned leading causes of death such as Heart Disease (including heart attack, stroke, heart failure and high blood pressure) and Cancer and also mentioned other chronic problems like Diabetes, Asthma, and Emphysema. The issue of cost, which will be mentioned again later, usually came up at this point in the focus groups. Together with specific diseases, people were very concerned about the cost of doctor and hospital visits, prescription drugs and health insurance. Perhaps because of the added effects of high costs, ill friends and family, poverty and chronic diseases, some focus group participants no longer had a sense of what good health should be. As an African American male in a Delta county said when describing a healthy person:

> They're not sick or anything. They're feeling more confident, and their happiness is shining through. It's just a beautiful day. It's been so long since I saw one of those people it's kind of hard to remember.

Partly because of community health problems and experiences with ill friends and family members, the focus group discussions revealed that the thermostat for health in many minority communities is set on “sick”. People described their problems, as in the following example from an African American group in the Delta, as less serious when compared to other people they knew or had seen.

Male Participant: But I feel that although you might not have this active life, exercise, you may not drink enough water, sometimes looking at other situations of other people can make you feel blessed and make your attitude about your little senior ache just be nothing.

Female Participant 1: I agree there.

Male Participant: I often tell guys about being at the VA Hospital with chest pains and having to stay in this waiting room such a long time. I ventured out and walked around and went up to the PX and there was a guy on a flatcar gurney with rollers on it. He had no legs. He had the use of his arms. He had his hair in a curl and it was in place. He was moving about in the PX. He was greeting everybody. He was smiling. And I went back down stairs, got in my car and went home. Because my ache …

Female Participant 2: Your ache wasn't anything.

Male Participant: … moved away.

In addition to concerns about personal illness, many environmental concerns were voiced by focus group attendees. Mention was made about chemical plants and explosions, safety of ground water, genetic alterations to foods and feed or medicines given to poultry and livestock. These concerns were common to all groups, regardless of racial or ethnic makeup. In fact, an African American female in the Delta told of an experiment her husband conducted

in which he fed his hogs corn that had been raised without the use of chemicals and compared his animals to those raised by other farmers. The environment's impact on the health of the community was particularly easy to see in this example from an African American female in the Delta:

> Even with the hospital being right under the chemical plants I'm almost scared to go to the hospital. They built a hospital right down in the middle of the chemical plants, here in (town).

As important a role as the physical environment played for focus group members, one aspect of the social environment was often mentioned as directly impacting the health of the community: poverty. One Caucasian female at a Delta focus group expressed the issue this way:

> I would like to put poverty at the number one level, and say everything else falls before that. We can say education is a problem but it's a problem because poverty forces other issues of survival ahead of the educational knowledge. And until we recognize that poverty is our problem, we've masked the ways to overcome it with all kinds of other things we're bringing in rather than saying, "Until we solve our poverty issues, we're going to have health problems."

This sentiment was echoed by another Caucasian female in a Central Arkansas focus group:

> I know a lot of people who do make that choice: "Do I buy groceries or take the baby to the doctor?" So that's something that needs to be addressed in our healthcare system and taken seriously not for just some people. Healthcare shouldn't be just for the elite. It should be mandatory for everyone. We are supposedly in this country where we are equal and free, however, that's not true. That's a lovely saying. We're the richest country in the world. Why can't we afford healthcare for our people when Cuba can give everyone free healthcare?

Competing Priorities and Economic Realities

Throughout the focus groups concern about the cost of healthcare was often repeated. The cost of prescriptions, insurance premiums, co-pays, doctor or hospital visits and emergency room care were all mentioned. These concerns were found across the economic spectrum and among all races and ethnicities, but were a part of daily life for group members at the lower end of the economic and social scale. In addition, minority group members that were elderly or full-time workers, two populations likely to benefit from government or employer-sponsored health programs, were not any more comfortable with their situation than people who were uninsured. This quote from an African-American male in a rural southern county typifies this feeling:

> But I understand that too, but when you work and the insurance, you're just working for nothing, just to have a label and you go and you've got to pay a doctor's visit that's outrageous and then they write a prescription that's outrageous. I mean, so you're working for chicken feed and it's just going to medicine so, I mean, like I said, I understand what you're saying as far as the older people, but we catch it as young people too because it's so outrageous.

Also, a Latino male in a northwest county spoke about medical debt:

> En los problemas que yo miro, esa es una de las deudas las cuentas de la gente hispana que esta subiendo mucho mas. Es por los doctores y los hospitales y por esa razón hay mas bancarrota en la gente, en la comunidad hispana, con… los billes médicos. (Among the problems that I see increasing very much are the debts, the accounts of Hispanics. It's because of the doctors and hospitals and for that reason there's more bankruptcy among the people in the Hispanic community from…medical bills.)

Participants were clearly concerned about their health and healthcare. However, competing economic priorities often got in the way of good health. It was clear that group members or persons they knew were regularly choosing between the basic necessities of life and medical care. The following quotes, one from an African American female in an urban southwest county and the other from an African American female in the Delta, typify this choice:

> You've a one year old child, you're already paying bills, so where are the resources that can back up and you tell me to be concerned about my health?

> Because the one that I was talking to today she is a diabetic, she done had her toe cut, and you know, she knows, but she says "I can't do no better. I got to burn gas this year; I couldn't get no wood, so I got to burn gas." Since her heaters are out now she has to buy gas. I know what she means, you know, by I got to choose, or hey, five pounds of rice, box of spaghetti, you know, that's going to fill me up, and some fried salt pork. I mean come on now.

This African-American female in the Delta seemed to have given up, as described in the following quote, before which she had talked about staggering medical bills as a result of her husband's multiple strokes:

> I was worried, but then I said I'm not going to worry no more. I said because God is going to take care of me. I said he done brought me this far. For Christmas, we had a good Christmas. We had food. We had roof over our heads, and my son said, "Well, mama you don't have to get me nothing". And that was the most important thing to hear him say that. He said "You don't have to get me anything. The only thing I need from you is love". When he said that everything was nice.

Suspicion of the Healthcare System and Building Mistrust

In all focus groups a general mistrust of the healthcare system was openly discussed. The mistrust of the system seemed to have basis in two themes: first, a suspicion that many players in healthcare are motivated by profit and second, personal negative experiences with healthcare providers or institutions. Participants had theories that the system operates with favoritism, kickbacks, collusion and disincentives for care. Doctors, hospitals, pharmaceutical companies and insurance companies were all cited as potentially out to maximize profits over the best interests of the patient. The following quotes illustrate this theme:

African American in a central county: And the system don't work. It's not made to. It don't work unless it's the CEO's mother, one of the nurse's relatives and then they want you to treat them with the utmost care. No, I'm treating them all the same. I'm not treating one any different than I'm going to treat the other one.

Caucasian male in an urban western county describing how doctors view patients: You know, "all you are is an insurance case to me."

Caucasian in a central county: And, of course, we all know pharmaceutical companies are giving kickbacks to the medical community and they are giving them free samples. They get a lot of perks from that. And if they don't prescribe the drugs they don't get the perks.

The system-wide mistrust also seemed to be rooted in negative experiences at the local level with a community physician or hospital. Even in the same community there were disparate experiences had by minority and majority residents with a provider or institution that led to different perceptions of that provider or institution. These experiences led to the belief in minority communities that a certain doctor or hospital did not treat minorities well and led members of those communities to avoid seeking care in those places. The following quotes are from the same county in the Delta, the first from a female participant in the Caucasian focus group, the second from an exchange with the moderator in the African American focus group:

Female participant: And we've got to support it. And the truth of the matter is none of us are trusting doctors all that much. I'm not sure our trust is any higher from Little Rock than here. What I'm suggesting is that we have a false sense of thinking things are better in Little Rock. And so I think we need a PR campaign for our hospital, some stories of our successes out there.

Moderator: So you believe that there's a difference in the care too?

(Group replies in the affirmative.)

Female participant: It's a difference.

Female participant: Don't take my dog down there (referring to local hospital).

Moderator: Don't take your dog?

Female participant: I said I don't take my dog.

Moderator: But why do you think we don't get the same care as other people might be getting?

Male participant: We don't know where white folks be going. We don't know what they do, because I haven't been in (local) hospital since 1957. They sewed my head up with some grass. You know, if I had to talk about that incident versus

the incidents that I hear about sometimes on a weekly or monthly basis, they just don't have a very good record for caring for Black people I know.

There is no doubt that these negative experiences affect the behavior of the minority citizen when seeking healthcare and may drive that citizen to delay seeking care or travel further in search of it, as described by this African American female in a rural southern county:

> I have told my sons, my daughter lives in Little Rock, but I have told my sons if I walk out here tonight and fall on one on them doorsteps out there, you better carry me somewhere north, don't carry me nowhere south. Don't let them bring me back in here because I know if they bring me back in here they are going to do something that I won't make it back out. So if I fall on the doorsteps, let those boys carry me north.

Barriers to Healthcare Access and Good Health

Just as focus group participants had concerns about specific diseases, economic factors and social problems, mention was made about other barriers that prevented access to healthcare and good health. Particularly in the Asian and Latino groups, the inability to speak English well was often cited as a major problem faced by members of these communities when seeking healthcare. Not only were there few experiences with health providers that spoke the language of Asian or Latino participants, examples were given of times when these consumers were expected to provide their own medical interpreters or pay for interpreters obtained by the healthcare provider. Participants in these groups realized that the language barrier directly influenced the quality of medical care they or their community members received, as in this quote from a Latino man in a northwestern county:

> Yo creo también es como es uno tratado, como lo tratan a uno cuando va a su doctor. A veces…he llevado personas al doctor y entonces, si no hablan ingles…yo pienso que hay discriminación porque a veces no les hacen las mismas preguntas que a alguien que habla ingles le hacen. (I think it's also how you are treated, how you are treated when you go to your doctor. Sometimes…I've taken people to the doctor and then, if they don't speak English…I think there's discrimination because sometimes they are not asked the same questions that are asked of someone who speaks English.)

A Latina female in a northeastern county mentioned the importance of prevention messages reaching Spanish-speaking Latinos:

> Puede haber todos los programas para prevenir las enfermedades pero si no llega a la gente que verdaderamente lo necesita no vas a notar nada de diferencia cualquier programa que sea. (There can be all kinds of programs to prevent diseases but if they don't reach the people that really need them, you are not going to see any differences in whatever program it is.)

The following exchange took place at the Asian focus group in a western county around the issue of language access:

Participant 1: I need to bring up point. I think it needs to on those brochures and things like that it needs to translate into the Vietnamese.

Participant 2: Yes, I've been doing that for the school system and sometimes for the hospital. But if you want to reach the public then you will have to --

Participant 1: It come to that point and they say "Where the money--where the funding?" If they translate into the Vietnamese or they have translated into Laotian or Thailand or Spanish that cost a lot of money. When they think the best way is just people to learn English, they don't have to use money for minority.

Participant 2: But I don't think it is right to me, because it's like you have to learn English to stay healthy. Because we want to prevent…we have to reach out and provide services even though it costs. That's what the Department of Health or the Department of Education is there for, to reach out and provide services and make sure that information is explained or reach the people. And, also, another thing is that it has been going for a long time, it's unfair, but I guess, I don't know what to do with it, but everything is translated, everything provided in Spanish and nothing in Vietnamese or Laotian.

Participant 1: Is that because of the population?

Participant 2: Yeah, but still if you provide services for one ethnic group you should do it for all. It's the, they call it the Civil Rights.

Furthermore, there was a realization by Latino participants that although a translator or interpreter is present for a medical encounter, there may still be problems getting proper treatment, especially when the consumer cannot read or write in Spanish. The following quote by a Latina female in a western county illustrates this point:

> Yo lo digo porque en mi caso mis papas son...no saben ni leer ni escribir, ellos se tienen que basar a lo que su traductor les diga o lo que no les digan. Yo pienso que asi como mis papas hay muchas de mayor edad que se tienen que basar a lo que ellos digan y muchas veces los traductores no estan diciendo lo que esta en el papel y ahi es cuando uno falla. (I say it because in my case my parents…don't know how to read or write and they have to base everything on what their translator tells them or doesn't tell them. I think there are lots of older people like my parents that have to go on what they are told and lots of times the translators aren't saying what is on the paper and that is when you fail.)

Other barriers experienced by participants when trying to access healthcare included long waiting times in emergency rooms and doctor's offices, limited appointment availability especially for Medicaid-holding or uninsured consumers, transportation problems and the high costs of insurance premiums and co-pays. People not only noticed long waits for a physician, but many were aware that several patients were given appointments at the same time, making it less likely that they would spend much time with the physician. Participants without health insurance that relied on free clinics frequently had long waits between times the clinic was open or a volunteer physician was available. In general, minority groups and low-income

Caucasians were more concerned with access to primary care, and higher income Caucasians were concerned with promptness of referrals to specialists or the lack of specialists in rural areas. Mention was made of bureaucracy as an issue in the key informant interview with a Native American:

> I was the chief here in the early 80's and they told us we couldn't get any more services, they said the money was just used up too much. IHS you know. And I asked the...office, "how many employees you got?" They got 475 employees, and why don't you get rid of about 300 of them, take all that money, and that would double the services to the Indians.

The issue of fear was discussed in a general sense by Caucasian and minority focus group members. The fear of not knowing what was wrong or what could be wrong with them or the fear of a particular diagnosis such as cancer prevented some from seeking care promptly. Among Latino participants, fear of having immigration authorities called on them in a healthcare or human services situation was a particular concern. The fear of immigration authorities is spoken of in the following quote by a Latina female in a northeastern county:

> Me preocupa ver como la gente no tiene realmente mucho acceso a lo que es salud. No se, lo veo mucho en (el pueblo), siento a la gente muy temerosa, porque yo he tenido contacto con muchas personas que por lo mismo que hablamos por su estatus o por estas cosas, sienten mucho temor de ir a las instituciones que son instituciones para ellos del gobierno, entonces la gente espera hasta el ultimo recurso para ir allá. Conozco también muchos casos de personas que aunque tienen papeles, no tienen idea de los servicios con que los que ellos cuentan ni los servicios a los que pueden tener acceso. Simplemente no saben. (It worries me to see how the people don't really have much access to health. I don't know, I see it often in (town), I feel people are fearful, because I have had contact with many people who for the same reasons we have been talking about, their status or these things, they are fearful of going to institutions that are for them government institutions. Therefore the people wait until it's the last resort to go there. I also know many cases of people who although they have papers, they have no idea of the services they can access. They simply don't know.)

The Physician Patient Relationship: Function and Dysfunction

As the focus groups progressed to conversations about experiences with the healthcare system, people were eager to recount positive and negative interactions with physicians. In fact, these stories came out earlier in some focus groups than was planned by the question guide. This theme is particularly important because the physician-patient relationship is the center around which healthcare operates. If the relationship is a good one, patients are likely to have better opportunities to remain in good health. If the relationship is poor, as was relayed by some troubling stories, people are likely to be driven away from a particular physician or institution, and may delay seeking the care they need. The following two quotations, both from African-American females in a Delta county and rural southern county respectively, point out two building blocks of the physician-patient relationship, communication and physical contact:

> You know, there's this thing with the medical profession. They have a tendency to want to make everybody who's not part of their profession feel ignorant and stupid, or "You don't know what you're talking about because, see, we're the experts on this". Just like you trust the doctors, you know, you wouldn't trust any information coming from me. Sometimes I feel like with all the different scientific papers I've read, I have some knowledge. I have some knowledge my doctor doesn't have, especially regarding my condition. The thing is they're on this pedestal, some of them, and they really take that seriously. "I'm a king doctor." You know, "How dare you question me? How dare you ask me?"

> Do more examinations. What most of us are saying is that as patients they are not being examined. They are asking them by word of mouth, "What is your problem? So you say this is your problem, then I'm going to write you this prescription for what you say is your problem." And it shouldn't be that way. They should be diagnosed. I should be diagnosed if I go there and say I'm sick.

Several minority participants expressed preferences for a same-race or same-language provider, but this was not an absolute requirement. In fact, as the following example from an African-American woman in a rural southern county illustrates, a physician encounter based on listening, touching and caring can easily overcome racial difference:

> I think our problem is we're dealing with the young, white doctors. That's where we're coming up with, "We don't care, give us some money and go home."... Like I said, we switched from the younger white doctor to the older white doctor and the first visit was just --I was just flabbergasted. He sat there for 45 minutes, touched her from head to toe. I mean, he explained everything, the prescription, the medicines. It was just a total difference. And I said, "You've got four new black patients because we won't be going back". He seemed concerned. He actually cared.

An Asian participant in a western county stated that people of his background entered into the physician encounter with a general sense of trust: "And most of the time they trust the doctor. It's just a mentality. Most Asian people trust their doctor a lot." And a Latina female in a northwestern county also spoke of a good experience with a physician that came from home in the middle of the night to take care of her husband:

> Bueno, la verdad en todas las profesiones todo mundo es diferente, el doctor tiene espíritu profesional de ayudar, realmente hizo su juramento y muchos doctores lo hacen por negocio nada mas. (Well, the truth in all the professions is that everyone is different; the doctor has a professional spirit to help, and he did what he swore to do, but many doctors do it only as a business.)

Mention was made in African-American groups of the notion of physicians experimenting on patients, not in the sense of using an experimental treatment, but in the sense that a treatment was being used without taking the patient completely into account. As a female participant in a western county said:

> ...and all of these medicines have five side-effects or more, and I said, "That will be fifteen other things that is wrong with me." He said, "No, they've got more than five side effects." And I said, "Well, I don't want it then. I'm not a guinea pig. I'm not going to take it."

An African-American male in the Delta connected this idea to poor treatment on the part of the physician:

> I think they are experimenting with us a lot, you know. "We'll give you this and see how it works." He's just giving you something to get you out of there.

Experiences with Inequalities in the Healthcare System

The focus group discussions concluded with participants recounting experiences they or their families had with the healthcare system. There were both positive and negative experiences relayed. When some minority and low-income Caucasian group members told of negative experiences, they identified race as a factor in poor treatment received or in poor health outcomes in their communities. More often, however, focus group members were willing to attribute poor treatment or outcomes to factors such as age, income, lack of health insurance, lack of access to healthcare and lower social status. For example, in the American Indian key informant interview, lack of health insurance coverage was identified as an important factor in receiving low quality healthcare. A Latino male in a western county summed up this convergence of factors:

> Yo creo que hablando generalmente de la gente hispana aquí en (el pueblo), sí existe de alguna manera racismo y las indiferencias, ya sea porque no hablan el idioma, o indiferencia por no tener aseguranza. No me gustaría que usted se vaya con la impresión que no hay problema, sí hay problema verdad y necesitamos de sacarlo al aire verdad. (I think that generally speaking about Hispanics in (town) there is a manner of racism and indifference towards them, whether it is because they don't speak the language or indifference because they don't have insurance. I wouldn't like you to leave with the impression that there are no problems; there are problems and we need to air them.

In general, economic differences were the most difficult to separate from race or ethnicity as direct factors in unequal healthcare or poor outcomes. The following exchange at an African-American group in a central county illustrates this dilemma:

Participant 1: And we die quicker than the other people.

Moderator: And why does that happen? Why are we sicker and why do we die quicker?

Participant 1: Because we don't have the medical care that they have.

Moderator: We don't have medical care and what else?

Participant 2: You know after we go through the medical, still we've got to get the money to get the medication. If we don't get the medication, what sense--I guess it's a good sense to know what your problem is. It's a hard time getting your medicine to help your problem. You pretty much is at the same point. You know it can go up and down from there. Is

African-Americans more sicker than whites? My opinion is doesn't make a difference. If you're sick, you're sick, black, white, what difference would it make? Not to be arrogant but really it matters.

Moderator: Are you all saying that differences are more along economic lines than racial lines?

Participant 1: I think so.

Moderator: Economics.

Participant 2: I'm tending to believe that race has something to do with it.

Moderator: Okay.

Participant 3: I guess it kind of in-between, it isn't an economic issue, but it is one that affects us by race because if you are talking about a small group of people compared to a larger group, then the percentages are higher in a small group of people because we quote, unquote, are more sick. And I think in one sense it does matter that if you are sick you're sick, but in another sense it does matter because then this is where a lot focus needs to go.

Part of the difficulty in identifying race as a direct factor in poor treatment or outcomes is that direct comparisons or experiences were often not possible to relay. With most negative experiences, participants felt poorly treated but were unsure if this was solely due to their race or ethnicity. The following quote from a Latina in a western county illustrates the question in the person's mind:

> Yo opinaría que, yo creo que a veces que sí hay veces que no es igual, porque yo esa vez cuando fuí con un doctor, pasaron todos y yo, me metieron al cuarto donde pasan a uno, y salieron todos y estaban allí todos así y yo fuí la última. Yo allí duré dos horas acá afuera y otra hora allí adentro sin ver al doctor ni cinco minutos de largo... Y ese día salieron todos los pacientes, yo fuí la última, ¿porqué? No se. (My opinion is, I think that sometimes there are times when it's not equal, because that time when I went to the doctor, everyone else went in and me, they put me in the room where they take people, and everyone else went in and left and I was the last one. I stayed out there two hours and another hour inside without seeing the doctor even for five minutes. And that day every other patient left and I was the last one. Why? I don't know.)

Participants did tell stories of good treatment as well. In this example from a Latina in a western county, the language barrier is overcome by a simple action on the part of a healthcare worker:

> …a ocho días yo regresé con mi hija porque tenía neumonía. A veces ellas (enfermeras o médicos) no pueden comunicarnos que está pasando o que le van a hacer a nuestra hija, pero cuando yo miraba que le estaban poniendo la aguja para ponerle el suero, yo miraba que mi niña, porque puede ser que le dolía demasiado, entonces al no poderla poner mi niña lloraba, entonces yo solté el llanto también y ella no me podía decir va a estar bien o algo, pero con un simple agarrada de mano, me podía

transmitir que ella estaba sufriendo junto conmigo lo que mi hija estaba pasando. Yo en ese aspecto no tengo nada que decir de los doctores, para mi todos han sido unas buenas personas. (…after eight days I returned with my daughter because she had pneumonia. Sometimes they can't communicate what's happening or what they are going to do to our daughter, but when I saw they were placing the needle in her arm to give fluids, I saw that my daughter, probably because it hurt and they couldn't place the needle, cried and I cried too. She (the healthcare worker) couldn't tell me it would be all right, but with a simple holding of my hand, she transmitted to me that she was suffering along with me what was happening to my daughter. In that aspect I don't have anything to say about the doctors, to me they have all been good people.

Focus group members were able to relay through their stories times when they felt pre-judged based on their color, English-speaking ability or assumptions made about them. The following quotes from an African-American male in the Delta and a Latina in a western county, respectively, speak to this feeling:

The system sort of thinks that we as African-Americans or Negroes, colored people are taking advantage of the system, and many times when we up for medical care people always look at and think that we are there on some type of assistance program. And very seldom will they think that Ms. (female African-American participant) has Blue Cross/Blue Shield, and so they start off with that perception already, that she is on the system, and that she's just another one of these numbers here and all we need to do is find out the minimum about her, push her out of here as fast as possible.

Estoy de acuerdo con el señor este, sí hay racismo en (el pueblo). A mi me ha tocado, auqnue sea que hable uno inglés, sí me ha tocado y es triste que sea así. A veces hasta voy y me quedo sorprendida con la forma que alguna gente así te trata aunque hables muy bien inglés, aunque te puedas comunicar perfectamente con los doctores y con la enfermera, o con simplemente la recepcionista; se ve la indiferencia que tienen hacia uno que es hispano. Por ejemplo, a mi me ha tocado que yo voy y la recepcionista bien seria, y pasa una americana y con la sonrisa de oreja a oreja y a mi otra vez seria, hacen sentir muy mal a uno. (I'm in agreement with this gentleman; there is racism in (town). It's happened to me, even though one can speak English, it's happened to me and it's sad that it's that way. Sometimes I go and I'm surprised with the way in which some people treat you even though you speak English very well, even though you can communicate perfectly with the doctors and the nurse, or simply with the receptionist; you can see the indifference they have toward someone who is Hispanic. For example, it's happened to me that I go and the receptionist seems very serious, and an American comes in and gets a smile from ear to ear and to me, serious again; they make you feel bad about yourself.)

There were few participants, usually one or two people in the minority groups, who were comfortable attributing negative experiences to overt discrimination or racism on the part of a healthcare system worker or institution. A Latino male in a western county made this statement about his town:

Se habla mucho aquí en la comunidad de discriminación por parte de los médicos y las clínicas. (There is much talk in this community about discrimination on the part of the doctors and clinics.)

The following dialogue between African-American participants in a rural southern county provides the clearest example from the focus groups of unequal care received by minority persons compared to Caucasians:

Female participant 1: Yes. Same with my kid, but the only thing she doesn't want to say, this other person, her child was white. I feel like that because there was such an epidemic going around with this flu, my child was diagnosed saying, "Oh, he's got the same thing. He's got the (town) crud," and you get cough medicine. A lady I work with took her daughter to the same doctor the same day; she had the flu. She gets an antibiotic. So my concern is when there is an epidemic or something like that with the flu, will the African Americans, will we be left out, you know? Will the medicine be given to the other people and we'll just be left out?

Female participant 2: Yes. We're left out now and it's just the flu. You know we have the (town) crud and the white children have the flu.

Male participant: The flu, right.

Female participant 1: And when it's like that, the medicine, you know, they were already talking about, there wasn't a shortage on the medicine. So my concern is why did that child get diagnosed with the flu-like symptoms, but mine had just (town) crud and get some cough medicine, or something like that? You know, with all this stuff--I guess my issue is with all the things going on with the potential war and they are talking about smallpox, where does the African American community or minority community stand when it comes to us saying, "Okay, we've had some kind of biological warfare." That may not be you concern, but that's my concern now. Where are we in that number?

Female participant 3: On the bottom.

Female participant 1: And just like with the flu, will we be the last person told? Will we not be served because the other people are getting that first and where are blacks concerned? I mean if we don't stop it now it's going to get on to something worse later on. I think something needs to be done now.

The discomfort felt in several groups during the discussions about race and inequalities in healthcare is portrayed in the following exchange from the Asian focus group:

Moderator: Can anyone else tell me about a situation where they were at a doctor's office or in the hospital or the emergency room or somewhere else, the way that you were treated or you and your sister or you and your mother, the way you were treated compared to other people that were in there. Was it different or was it the same?

Male participant: You want us to say it's racial or something?

Moderator: I want you to say whatever you want. If you think everybody got the same treatment, I want to hear

that. If you think that you didn't, I want to hear that, and why you think that was true.

Male participant: We don't know. We just look and say, "Hey, why don't they treat us like"--in the restaurant, you walk in there and you sit right there and wait for someone to come. Maybe the food you ordered takes longer to cook, so we don't know. We don't know. We can't tell. We can't say. We can't say something like that.

Female participant: I work with a lot of parents and I see that. It's something that you have to tell--because this has to do with health. When the police stop an Asian person, if you don't speak the language, if there is an accident or a wreck, okay, usually that Asian person gets a ticket. That's what they told me, because you don't know how to explain. And not many people will be on your side as a witness. That's what they told me. And also in the doctor's office, a student of mine came in and the parents didn't speak the language and when I came in with a tag on (from) the school system they helped the student right away. They thought I was some kind of authority.

In many other stories that were recounted by minority individuals, race seemed to play a central role in the treatment received by the individual, and changed that individual's behavior in seeking healthcare for themselves or their families. The following exchange between two African-American females in the Delta illustrates a behavior change:

Participant 1: I've always liked black doctors. I've always had a black doctor. I don't want a white doctor. You can't relate to my life.

Participant 2: I'm with you. I only go to black doctors, and I am not sorry. I purposely do that. I guess I feel more confident.

It was easier for minority individuals to see inequalities on a personal level, but there was not much mention of differences in care or outcomes at the community or national level. The following dialog from an African-American group in a central county is an example of awareness of health inequalities and implications for minority groups on a larger scale:

Participant 1: That's why you do you don't hear much on it now. That's why you don't hear much about it any more because of the brown face now. And on those clinical trials on February it was this clinical trial on HIV/AIDS, and the news report said, "Clinical trials failed to do what we wanted it to do", oh, but it helped African-Americans and Asians, but it was a failure overall because it didn't help--

Participant 2: Because it didn't help the whites. I'll say it. I heard it too. It won't help the white, then they won't bring it to our country.

There was a general lack of awareness of health and healthcare disparities in Caucasian groups. For example, in a western county, a white female responded "I certainly wouldn't know" to the moderator's question "Have you noticed anything, and I am just going to be specific, around race issues?" A female in the Delta said: "I couldn't imagine why they wouldn't get good treatment." However, there were two notable exceptions as seen in the following quotes. In the first, an exchange at a central county group, participants responded to a moderator's question about why people received different treatment:

Female Participant: Race.

Moderator: Race? Do you think it is, you've seen it?

Female Participant: Oh yeah, you see it all in everything else.

Male Participant: The doctor I was going to…there was a black lady and a white lady sitting there. He took the white lady before he took the black lady. I just didn't think it was right.

In the same group, a male participant recounted an experience trying to help a Spanish-speaking friend seek care:

> Because they are discriminated against. Because they don't speak the English and when they go in to a doctor's clinic they may be rushed in and rushed out or not even seen because they have no way to describe what their complaint is. I mean, when I called in any appointment to the doctor's and he could never get seen because I didn't speak enough Spanish to help him. The doctor spoke no Spanish. She couldn't justify seeing him because we couldn't talk about his symptoms well enough for her to make a diagnosis so he could have gotten treatment. And that goes on in clinics here as well because they are not very savvy to that culture. And I've been in places where nurses are talking about these people openly because they think they can't understand them. They are discriminatory. They are breaking all sorts of confidentiality rules because they know these people aren't understanding a lot of what they are saying. And when you make it known you understand what they are saying, it's a whole different ballgame.

An African-American male in a rural southern county summed up the general feeling in minority groups around the issue of race and healthcare. Unfortunately, this state of affairs was not confined to a certain city, region of the state or minority group.

> So it shouldn't matter where you work, what color you are, if you are there to take care of the people, it shouldn't--like I say, it shouldn't even matter, but it do in this city. It's all about your status. It's all about what shade you are and something like that, but it shouldn't be that way.

Group Recommendations

Focus group participants often made recommendations during the course of the discussions on how to improve upon issues that were raised. Some ideas were individual in their impact; others had more of a community direction. For instance, a Latino male in a western county stated what had been brought up in each Latino focus group, full access to available health programs:

> Yo nomás quiero afinar un punto aquí…yo no creo que nosotros los hispanos estamos esperando que venga el gobierno a traernos programas especiales porque somos Mexicanos, no creo que nadie estamos pidiendo eso. Nosotros solamente pedimos que ya están estos programas llevando, siendo llevado a cabo en otras partes, que se presenten también a nosotros. Yo creo que si pagamos impuestos tenemos los mismos derechos y yo no digo que tengan esto porque son Mexicanos, no,

> nosotros también pagamos impuestos, somos ciudadanos la mayoría, ya aquí o residentes, y estamos pagando impuestos. Y si ya estos programas están llevando a cabo en otras partes que también se ofrezcan a nosotros. (I just want to clarify a point here…I don't think that as Hispanics we're waiting for the government to bring us special programs because were Mexican, I don't think any of us are asking for that. All we are asking for is the programs that are already being done in other places that they also are made available to us. I think that if we are paying taxes we have the same rights and I'm not saying they should have this because they are Mexican, no; we also pay taxes, the majority of us are citizens or residents and paying taxes. And if these programs are being carried out in other places they should also be offered to us.)

Although participants could tell through their stories when they received poor treatment, there was not a sense of what standard, or adequate medical care should be, as noted in this African-American's response at a Delta focus group to the question "Do you think there should be like a baseline standard of care that all doctors should provide?": "There probably is, we just don't know." In fact, there was only one participant who mentioned a specific measure of quality diabetic healthcare. There was a sense expressed by some individuals that help from the medical community would be welcome to improve treatment of minorities, as in the following quote from an African-American female in a western county:

> Is it a possibility, we don't have that many minority physicians or medical physicians in (town), is there a possibility for the minority physicians in this area to come together, not just for a party, but come together to discuss the concerns that we have? You know, maybe they can do surveys for a period of time in their offices for the patients that come in, or even send them out to their patients for them to fill out, and then they come together and discuss those concerns to see how it is they could help us.

In most minority groups there was mention of a need for the individual to be more assertive or outspoken in the medical encounter. Asians felt that Latinos and African-Americans were more assertive while Latinos felt African-Americans were more assertive. In one African-American group a participant stated that African-Americans living in the North would not put up with what those living in the South would allow. The following quote is from a Latino male in a northwest county:

> El valiente vive mientras el cobarde quiere. Si nosotros nos defendemos a lo mejor en otra ocasión que volvamos a ir a esa cita o con esa persona, ya no nos va a tratar igual. (The valiant lives while the coward wants. If we speak up for ourselves it is likely the next time we go to that appointment or with that person, we won't be treated the same way.)

There was a need articulated for more information on health individually and collectively, but with some reservations as stated in the following quotes from African-American females in a central and Delta county, respectively:

> I wish it there was way that we could be treated as a whole and as a people. We're afraid it will make things worse for us. So, therefore, overall, as a whole, we are afraid to speak up and speak out because we don't think it would make things better but worse for us.

> One thing you have to do. I'm not going to meetings that are offered by whites in white neighborhoods.

There were some Caucasian participants, as these quotes from a female and male, respectively, in the same Delta county show, who were concerned about finding solutions to health inequalities without having an inclusive, community focus:

> I also have a last word that I would like to say. I do not think it is helpful for a group of all us white people to come together to talk. I think it furthers the separation in the county. I would like the outside group that planned this, from wherever ya'll come from, to hear you're here but you're not helping if we're not consistent with where we need to go in this county. This kind of conversation needs to happen among the diversity that is in the county.

> I saw us sitting here with us all older people, white folks, and we didn't have any blacks, nor poor. And I was thinking this is one sided and we need to be sure to get to the real--because we don't have the healthcare needs that some of the black people do and some of the poor or older people. I'm thinking how do we get to that place? Because I think what you're trying to do is try to meet the health needs of the whole community and we probably don't represent the whole community.

A Latina participant in a northeastern county described the combination of personal and community solutions to the health inequalities:

> Yo creo que la salud es personal pero también comunitaria…los que tenemos conocimientos los que podemos ayudar debemos ayudar a los que no cuentan con el conocimiento…porque desde su propio país tal vez no tuvieron la información no hay quien les ayude, entonces como que vienen con esa mentalidad acá y llegan acá con la misma pensando nadie esta para ayudarles, entonces pienso que todo debe ser en comunidad. (I think health is personal but also of the community…those of us with knowledge that are able to help should help those who don't have the knowledge…because from their country of origin they may not have had the information, they didn't have any help, so it's like they come here with that mentality and the same thought that no one will help them. Therefore I think that everything should be done in community.)

SUMMATION

The themes that emerged from the focus group discussions pointed to a healthcare system that is far from perfect for any individual, but worse so for an individual that is a minority, poor, uninsured, elderly or speaks a language other than English. On top of that, troubling stories were told of how minority individuals face additional obstacles due to skin color, language or preconceptions of caregivers about a minority person. The following themes emerged from the group interviews:

- In many minority communities the thermostat or frame of reference for health is set on "sick" as participants have come to view health only in terms of ability to work or carry on basic activities and accept many chronic illnesses as part of life.
- Several socioeconomic factors, most importantly poverty, compete and often overshadow individual and community health.
- Personal negative experiences with healthcare providers or institutions and a sense that parts of the system are only motivated by profit have led to a building mistrust and suspicion of the healthcare system.
- There are many barriers such as poverty, lack of insurance, fear, inability to speak English and a lack of cultural awareness by providers that impede the individual's access to quality healthcare and good health.
- The function and dysfunction of the physician-patient relationship is a major factor in driving the behavior of the healthcare consumer.
- Minority participants have experienced inequalities in the healthcare system and at times were able to identify that poor treatment was connected to their race or ethnicity. Race or ethnicity was often difficult to separate from other socioeconomic factors that could impact poor treatment.
- Focus group members often made recommendations on how to improve the problems that were discussed.

Participants in the focus groups across the state were eager to discuss their ideas of health and their experiences with the healthcare system. The meetings were conducted in a way that would allow for comfort of the group before questions about experiences were asked. However, in several focus groups in minority communities, these stories were told and issues of poor treatment came up before the questions were asked. Although discrimination and racism were difficult topics to discuss, they were clearly on the minds of the discussants, and a few were willing to offer them as reasons for poor treatment and health inequalities. There were few examples of direct comparisons between treatment received by minority and non-minority healthcare consumers, but those offered were troubling stories. Unfortunately, against a backdrop of an imperfect healthcare system, people least equipped to navigate barriers outside and inside the system demonstrate through their personal experiences and histories the perpetuation of disparities in health outcomes via disparities in healthcare and access. The willingness of communities to engage in these discussions and the hope for individual and collective solutions signals an opportune moment to improve the healthcare and health of the entire state and nation.

CONCLUSION

As the population in Arkansas becomes more diverse, it is important to address the health and healthcare of minorities if there are to be improvements overall in the health of Arkansans.

The socioeconomic status of minorities places them at increased risk for poor health. The data show minorities have lower incomes, are more likely to be unemployed, uninsured, have lower educational attainment, and are more likely to live in poverty.

For risk factors and health behaviors, there are assumptions being made about minority communities for which there are insufficient data. This study attempted to augment the ability to describe the risk behaviors of minorities by combining several years of data, but this was still insufficient. For all population subgroups other than African Americans, sample sizes of people who answered surveys such as the BRFSS and CPS were too small on which to base conclusions. If conclusions about risk factor status in these subgroups cannot be made, decisions for funding and policy development cannot be based on sound local evidence.

Data insufficiency also limits conclusions based on mortality and hospital discharge data except for African Americans. Although in some cases, even data specific for African Americans was unavailable. The mortality data for all causes and the leading causes of death show statistically significant increased mortality for African Americans across all diseases profiled in this study except motor vehicle accidents and lung cancer. The hospital discharge data reveal increasing costs, in general, for most diseases and there are indications that race-specific coding of data is improving.

Utilization of healthcare services is an important measure of healthcare quality in a population. This study found that for minority groups other than African Americans, data on utilization of preventive services such as mammograms is based on small sample sizes. Additionally, this is against a backdrop of already low utilization rates in the state for prevention activities such as flu vaccinations and is impacted by the more than 400,000 Arkansans without health insurance.[52]

Poverty, lack of health insurance and mistrust of the healthcare system are barriers that all Arkansans face in the search for health. Minority communities, however, are more heavily impacted by these and other barriers, such as speaking a language other than English and experiencing a disconnection with healthcare providers. In many minority communities the thermostat or frame of reference for health is set on “sick” as participants have come to view health only in terms of ability to work or carry on basic activities and accept many chronic illnesses as part of life.

[52] “Arkansas Health Insurance Expansion Initiative Summary of 2001 Roundtable Interim Report”, Arkansas Center for Health Improvement, Little Rock, AR., pp. 1. 2001.

Minority focus group participants generally expressed a preference for a provider who was of like racial or ethnic background. However, there were positive experiences described by minority participants who encountered a Caucasian healthcare provider that seemed to care for them. These experiences were usually mentioned in a context of a provider taking additional time or providing other supports for a patient from a different culture or speaking a language other than English. This underscores the need for a diverse healthcare workforce that not only reflects the racial and ethnic makeup of the state but also provides culturally and linguistically appropriate healthcare services. There is no doubt that these negative experiences affect the behavior of the minority citizen when seeking healthcare and may drive that citizen to delay seeking care or travel further in search of it.

RECOMMENDATIONS

Public and Health Policymakers

As this study documents, there are large disparities in death rates and disease burden between minority and non-minority populations. These disparities in death rates have persisted and for diseases such as colorectal cancer, breast cancer, prostate cancer and diabetes seem to be worsening. Public and health policy decisions must be evaluated in light of these disparities. Furthermore, those decisions must be based on accurate data for specific populations.

- Specific agency action steps
  - Arkansas Department of Health (ADH)
    - Mortality, Hospital Discharge and Risk Factor Data
      - Mortality data and Maternal Child Health data must be consistently reported by race and ethnicity. This will require accurate recording of race and Hispanic origin on birth and death certificates. Since healthcare providers bear ultimate responsibility for signing death certificates, a specific education effort would likely be required to improve the data provided to ADH. This education could be accomplished with the help of the Arkansas Hospital Association, the Arkansas Medical Society, the Arkansas Foundation for Medical Care (AFMC) and providers of Continuing Medical Education.
      - Capturing the correct race and ethnicity needs to improve for the Hospital Discharge data. Indications are that this is improving, given the improvement in the 2002 data compared to previous years. Hospitals must continue to record the race and Hispanic origin of patients.
      - In the case of the BRFSS, minority populations need to be over-sampled to have sufficient numbers of responses on which to base conclusions, and the survey tool needs to be administered in languages other than English, especially Spanish, with consideration for other languages like Vietnamese, Marshallese and Laotian. This will have added cost to the ADH and will likely require legislative appropriation of additional funds. An administrative plan to enable use of additional funds or outline specific costs required for legislative consideration must be done.

- Arkansas Department of Human Services (DHS)
  - The Health Plan Employer Data and Information Set (HEDIS) is a set of standard performance measures that enable the evaluation of healthcare services received by a group of people in a health plan.[53] This tool is utilized to assess the quality of healthcare that is received by the Medicaid population in Arkansas. This study shows that 130,000 African American and Latino Arkansans have Medicaid. Therefore, it is critical to assess the quality of care received by these populations and report results alongside information for Caucasians. However, these data were not able to be adequately analyzed for this study. Barriers encountered when attempts at analysis were made included missing data, small sample numbers, and inability to calculate rates for all racial and ethnic groups. To improve the data, accurate race and Hispanic origin on Medicaid holders must exist. For the data that currently exists, a strategy for aggregating across several state fiscal years and counties may improve usefulness of the data to evaluate the quality of and satisfaction with the healthcare received by all subgroups of the Medicaid population. Additionally, other health plans (including Medicare and Medicaid) and hospitals must not only track the race, ethnicity, socioeconomic status and primary language spoken of their enrollees but also report quality measures for each subgroup. The UAMS College of Public Health, the Arkansas Center for Health Improvement (ACHI) and the AFMC can all contribute to this effort.
  - A specific role for the Multi-State Integrated Database (MSID), a project of ACHI and used heavily for this study, would bear consideration because of the ability to have all data sets in one place for ease of access and analysis. The MSID can help assess the impact of policy changes in healthcare financing, distribution of resources, and programs on all populations, especially those that experience the disparities documented in this study.

- Arkansas Tobacco Settlement Commission (ATSC)
  - Because the state has boldly committed to the expenditure of tobacco settlement funds for health improvement and prevention of disease, the ATSC must be a check and balance body to ensure all new and expanded programs that utilize these funds accurately record and report the impact of the programs on the populations that experience the disparities documented in this study. This information must be race and ethnic specific, and be reported in such a way that the proportion of people served in comparison to the local population is easily identifiable. If new information on health disparities is learned as a result of these projects, the information must be disseminated.

- Interagency action step
  - Coordination between agencies that keep and collect the data mentioned above, as well as other population health data, (ADH, DHS for example) is critical in order to facilitate access to the data and its analysis by race and ethnicity. An interagency task force that includes these and ACHI, AFMC, the Arkansas Minority Health Commission (AMHC), UAMS, Arkansas Children's Hospital (ACH), and other institutions can improve overall data coding, retrieval, analysis and regular dissemination to improve data reliability for all populations and track progress or lack of progress in improving health inequalities.

[53] Arkansas Foundation for Medical Care. 2003. "Measuring More of What Matters A Report to the Community HEDIS Measures in Arkansas".

- Consideration should be given to a health information survey done with minority Arkansans to assess health inequalities on a large scale (large number of responses). This study demonstrates disparities in health outcomes and behaviors between Whites and African Americans, but data on other subgroups is insufficient to make conclusions. The focus groups identified themes such as language barriers, lack of cultural awareness of healthcare providers and experiences with poor treatment by Latino and Asian participants. These themes could serve as the basis for development of particular questions to ask larger samples of these and other population subgroups. Although enabling legislation was passed by the 2003 General Assembly for this concept, funds were not appropriated for the survey.[54] The California Health Interview Survey is an example of this concept.[55]

Healthcare Workforce Educators

Focus group participants sought providers, often of their own race, cultural backgrounds or spoken language, because they felt better cared for and better understood. Other participants simply wanted a provider, regardless of race or ethnicity, who would listen to them and make an effort to understand their needs. However, given the low percentage of minority trainees and faculty documented in this study, it is essential to improve not only the diversity of students and faculty but also the cultural competence of all trainees and faculty currently in medical, nursing, pharmacy, allied health and public health schools.

- Recruitment and retention of faculty and students
  - Minority students and faculty must have representation on admissions, recruitment, promotion and tenure, development, curriculum, policy, research and search committees, to ensure participation at all levels of institutional decision-making.
  - More than half of the practicing physicians in Arkansas trained at UAMS. The other UAMS colleges train the majority of the future healthcare workforce. As an example, the makeup of the academic medical faculty and the medical school class does not reflect the racial and ethnic makeup of the state. As important as it is to recruit a diverse faculty, it is equally important to retain and promote those faculty members (in all disciplines) starting the moment they are appointed to the academic body. As minority faculty are successful and gain promotion, they will attract more minority faculty and minority students.
  - Prospective students from all backgrounds, especially from diverse language and cultural origins, must be encouraged to enter the health professions, be exposed to role models in health professions at the earliest possible time, and encouraged to serve their communities or enrich the educational experiences of other students. In spite of several programs aiming to bolster minority medical students and faculty, this study documents the decline in percentage of African American students and faculty in the UAMS College of Medicine over the last 15 years. To the extent that this trend is reversed throughout all institutions educating health professionals, communities will ultimately benefit from an increase in minority providers.

[54] Act 1705, 84th General Assembly, 2003.
[55] http://www.chis.ucla.edu/

- Cultural competency
  - Education in all the health professions must integrate cultural competency throughout the curriculum. There are several models of such curricula used in a variety of settings[56] and more are under development throughout the country. Federal agencies and professional associations such as the National Hispanic Medical Association and the Hispanic-Serving Health Professions Schools are excellent resources for available curricula and model programs.
  - Thought must also be given to the inclusion of Spanish language instruction, especially in primary healthcare education, given the rapid growth of the Spanish-speaking population. The demographic section of this study highlights the growth and English-speaking ability of this population and the focus group participants often mentioned the need for healthcare providers who could speak the language of the client.

Healthcare Institutions

Healthcare institutions play a clear role in the treatment of disease on the individual level, but as the focus groups illustrated, populations with poor health outcomes and negative experiences with healthcare systems have lost trust in the very institutions that are in their community. This loss of trust impacts the behavior of consumers and would delay treatment at best, or hasten death at worst. Hospitals, provider groups and public health clinics cannot eliminate health disparities alone, but are an important element of service improvement to all populations, specifically those experiencing inequalities in care.

- Effort must be made to include formal and informal minority leaders on hospital boards, planning committees and other decision-making bodies at the local and state levels in order to restore trust in healthcare providers and institutions.
- Institutions must be more aware of the diverse cultures, languages and needs of their patient population. Institutions must then move from improved awareness to increased responsiveness to the particular needs of the populations they serve, including those subject to the disparities outlined in this study.
- Institutions must use the readily-available federal resource describing the provision of culturally and linguistically appropriate services, known as the CLAS standards.[57] These standards provide a tool for and can help formulate an institutional self-examination of services including availability of language interpretation services, signage in languages frequently encountered in the population served, and recruitment, retention and promotion of a diverse staff and organizational leadership. Specific discussion follows in the Healthcare Providers section in regards to language services.
- As was mentioned in Asian, Latino and Caucasian focus groups, health promotion and disease prevention pubic health materials must be available in a variety of languages, especially those predominant in the service area.

[56] Betancourt J., Green A. and J. Carrillo. 2002. “Cultural Competence in Healthcare: Emerging Frameworks and Practical Approaches”. Field Report, The Commonwealth Fund, New York.

[57] “National Standards for Culturally and Linguistically Appropriate Services in Healthcare-Final Report”. 2001. Prepared for Office of Minority Health, U.S. Department of Health and Human Services by IQ Solutions, Inc., Rockville, MD.

Healthcare Providers

The workforce data show that Arkansas has a lower density of physicians than the national average and that the fewest healthcare providers in number and proportion are frequently in the Southeast and Southwest public health regions. The African American population and some Hispanic communities are more concentrated in these regions. Healthcare consumers already disadvantaged by low provider density spoke in the focus groups of a higher value placed on positive relationships with their healthcare providers. Stories told about healthy provider-patient relationships often were based on the personal concern shown by the provider. This was even more helpful when the provider was of a different racial or ethnic background and did not speak the primary language of the consumer. Therefore, as the current healthcare workforce understands more about the communities they serve, these relationships will improve. Indeed, what outcome can be expected when a physician spends less than five minutes with a patient from a different culture about whom the physician knows little, if anything?

- First objective: improve cultural competence of the current workforce
  - This can be accomplished through use of curricula, as mentioned in the healthcare institutions section, and can take the form of a Continuing Medical Education course, or similar courses in all health professions. UAMS, especially through its distance learning programs, other UA System schools, AFMC and the Arkansas Medical Society could all be likely partners in such an activity.
- Second objective: Improve the cultural and linguistic appropriateness of health services
  - Increase provision of interpreters to Limited English Proficient (LEP) patients
    - The importance of providing linguistically appropriate medical services is not only a moral and ethical issue but is a matter of federal statute. This has received attention in medical and other literature and is summarized in these statements: "...the U.S. Department of Health and Human Services (DHHS), Office for Civil Rights (OCR), views inadequate interpretation for LEP patients as a form of discrimination. Language barriers are seen as a characteristic uniquely associated with national origin. Therefore, since the Civil Rights Act of 1964 includes national origin as one of the bases for protection, people with limited English proficiency are considered a protected class for whom equal access to healthcare must be guaranteed. Programs that receive federal funds risk loss of federal resources if they do not comply with equal protection for LEP patients in the healthcare system." [58]
    - The pressing need for professional, trained medical interpreters and the consequences that can ensue with the use of ad-hoc interpreters is well documented in the medical literature. [59],[60] Healthcare systems must carefully examine the

[58] Lee, S. M. and C. Pope. 2001. "Patients Who Don't Speak English: Improving Language Minorities' Healthcare with Professional Interpreters". Final Report prepared for Office of Minority Health, U.S. Department of Health and Human Services: p. 4.
[59] Woloshin, S., N.A. Bickell, L.M. Schwartz, F. Gany, H.G. Welch. 1995. "Language barriers in medicine in the United States". *JAMA*, March 1, 1995, vol. 273, no. 9:724-728.
[60] Flores G., M. Laws, S. Mayo, et al. 2003. "Errors in Medical Interpretation and Their Potential Clinical Consequences in Pediatric Encounters". *Pediatrics* 111: 6-14.

needs of their consumers for language services and hire or train professional medical interpreters to improve the care delivered to non English-speaking clients. It is unacceptable, and would be in violation of federal statute as above, to place the burden on the client to provide an interpreter or expect the client to pay for those services. Third-party reimbursement for medical interpreter services must be examined and pursued, as in Washington and other states.[61]

- In terms of cost of providing interpreter services, an estimate of $4.04 per visit has been reported to the US Congress by the Office of Management and Budget.[62]

- Healthcare providers must also use the readily-available federal resource describing the provision of culturally and linguistically appropriate services known as the CLAS standards, previously mentioned in the healthcare institution section.[63]

Consumers and Communities

The health disparities documented in this study cannot be solved by one agency, institution, provider or community working alone. However, communities are a natural avenue for engagement around racism and discrimination experiences from the healthcare system, healthcare access and quality issues, risk factor education and targeted, population-based interventions to address particular problems identified in the community. Mention was made in many focus groups for the need to know that healthcare providers and systems care about the health of minority residents. Effort must be made to include formal and informal minority leaders in this process as well as on hospital boards, planning committees, quorum courts, and other decision-making bodies at the local, state and national levels in order to restore trust in healthcare providers and institutions. Counties with the highest age-adjusted all-cause mortality rates, for any racial or ethnic group (Phillips, Mississippi and Crittenden, for example), would be a natural place to begin this work, with special attention paid to diseases for which large disparities exist between Whites and African Americans (HIV/AIDS, Diabetes, Prostate Cancer, Stroke, for example).

- First objective: Evaluate racism as an element of healthcare inequality
  - Evaluation of the contribution of racism to healthcare disparities must begin in communities by engaging in honest discussions about previous experiences with the healthcare system and documenting the incidents of poor treatment. Racism certainly exists in the healthcare setting as it does in the rest of society at the internal, individual and institutional levels.[64] This evaluation should have a two-pronged approach that explores perceptions and experiences with racism in

[61] Betancourt J., Green A. and J. Carrillo. 2002. “Cultural Competence in Healthcare: Emerging Frameworks and Practical Approaches”. Field Report, The Commonwealth Fund, New York.
[62] Office of Management and Budget. 2002. Report to Congress: Assessment of the total benefits and costs of implementing Executive Order 13166: Improving access to services for persons with limited English proficiency.
[63] “National Standards for Culturally and Linguistically Appropriate Services in Healthcare-Final Report”. 2001. Prepared for Office of Minority Health, U.S. Department of Health and Human Services by IQ Solutions, Inc., Rockville, MD.
[64] Jones P. J.. 2000. “Levels of Racism: A Theoretic Framework and a Gardener’s Tale”. *American Journal of Public Health* vol. 90, no. 8, 1212-1215.

minority communities and examines institutional policies and practices that impede access to healthcare for minority members of the population. An argument may be made that perceptions of individuals may or may not reflect actual events. However, as the focus group participants described in experience after experience, perception drives behavior. And if these behaviors directly lead to delays in seeking treatment, as mentioned in focus groups, the health of the individual and entire community is compromised.

  - Action: Have conversations with communities to document experiences with discrimination and racism in the system, document the problems identified and formulate a plan to address critical problems immediately and systematic problems strategically. This step could be initiated by a particular community, healthcare institution, community based organization or faith-based group.
  - Action: Improve the understanding of healthcare quality indicators, as mentioned previously in regards to the HEDIS data, in minority and majority communities in order to empower people to advocate for improvements in care delivery systems. Education efforts to improve the understanding of these measures must be done in a culturally and linguistically appropriate manner.

- Second objective: Identify problems with healthcare access and quality and formulate solutions
  - This study documents many barriers to healthcare access reported by minority focus group participants. From a socioeconomic point of view, minority residents would be least equipped to overcome additional barriers imposed to healthcare access or a poor relationship with a healthcare provider or institution. The problems identified are universal, but will require specific action community by community.
  - Health insurance access was a specific need mentioned in most focus groups. This is applicable to all populations but bears critical importance for subgroups such as low-wage workers that are unable to purchase private insurance. Although not sufficient to address healthcare disparities, access to and use of health insurance would remove a significant barrier identified in this study.
- Third objective: Identify problematic risk factors with the help of the community and develop strategies for reducing risky behaviors
  - Risk factors such as smoking, obesity, lack of exercise, physical inactivity, and poor nutrition could ideally be addressed at the community level with knowledge of specific problem areas and norms in the community. Focus group members generally knew how to stay healthy, but suggested that environment (fast food restaurants, pesticide spraying, and cost of healthy foods) played a major role in their efforts to stay healthy. Participants did mention the desire for educational efforts aimed at improving nutrition, for example, and addressing this issue would have direct impact on many of the health concerns they expressed: cancer, diabetes, and heart disease to name a few. Focus group members had insight into other problem behaviors such as drug and alcohol abuse, domestic violence and teen pregnancy that needed additional public health attention.

Many focus group participants learned from others in their groups about the availability of a program or support for their needs in their community. To the extent that knowledge about these resources and how to use them is improved, community members will benefit from programs that already exist. Government and non-government agencies that provide health and human services to individuals must improve their outreach efforts to minority communities, especially those not speaking English as a first language, and utilize the informal and formal networks in minority communities to improve knowledge and utilization of resources.

SPECIAL THANKS

Allison Hitt
Amy Howell
Anna Huff
Beth Stevens
Carol Marcellini
Deborah Bell
Diana Shiell
Elese Brown
Father John Kerr
Gara Mosier
Gwen Fort
Jane Johnson
Focus Group Recruiters
Julie Furlow
Mai Le Nguyen
Maria Blank
Michelle Hammer
Nathaniel Reed
Paige Grafton
Patricia Jackson
Ramona Taylor
Sarah Woods
Teresa Hodges
Verdia Maxwell
William Cooney
Dr. Bill Golden
Nena Sanchez
Alvah Griggs
Ann Bynum
Belinda Green
Cesar Aguilar
Clayton Wells
Derrick Evans
Edra Young
Eric Parker
Freeman McKindra
Gaylene Mooney
Hezekiah Stuart
Jean Sparks
Judi Gage
Loy Bailey
Margo Reiser
Melanie Marshall
Natalie Carr
Olivia Rubio
Pam McFadden
Penny Harris
Rosa Maya
Shirley Hadley
Valandra German
Vickie Johnson
Cheryl Rabillet

APPENDICES

APPENDIX A: ARKANSAS MINORITY HEALTH COMMISSIONERS 2002

Larnell Davis-Chairman

Eddie Mae Martin

Dr. Jossetta Wilkins

Christine Patterson

Dr. Cesar Compadre

Vivian Flowers

Dr. Theresa Travis

Joe M. Hill

Vanessa Davis

Judge Waymond Brown

APPENDIX B: DATA RESOURCES AND OTHER SOURCES

Mortality Statistics

The Arkansas Department of Health, Division of Vital Statistics collects information on all deaths of Arkansas residents. Each year a report is complied that contains tables of counts of deaths classified according to the cause of death and the age, race, and sex of the decedent. The data are obtained from death certificates. Each death certificate contains information relating to the cause of the decedent's death. The information is coded according to the International Classification of Diseases.

Hospital Discharge Data System

The Arkansas Department of Health, Center for Health Statistics requires all nonfederal hospitals licensed by the state of Arkansas to report data on inpatient discharges or patients with at least one full day of stay. The data collected include billing information, medical information, hospital charges and patient demographics.

Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) is a telephone survey conducted by all state health departments, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam with assistance from CDC. The BRFSS is the largest continuously conducted telephone health survey in the world. States use BRFSS data to track critical health problems and to develop and evaluate public health programs. The BRFSS is the primary source of information on the health-related behaviors of adults in this country. States use standard procedures to collect data through monthly telephone interviews with adults 18 or older. BRFSS interviewers ask questions related to behaviors that are associated with preventable chronic diseases, injuries, and infectious diseases.

County Business Patterns

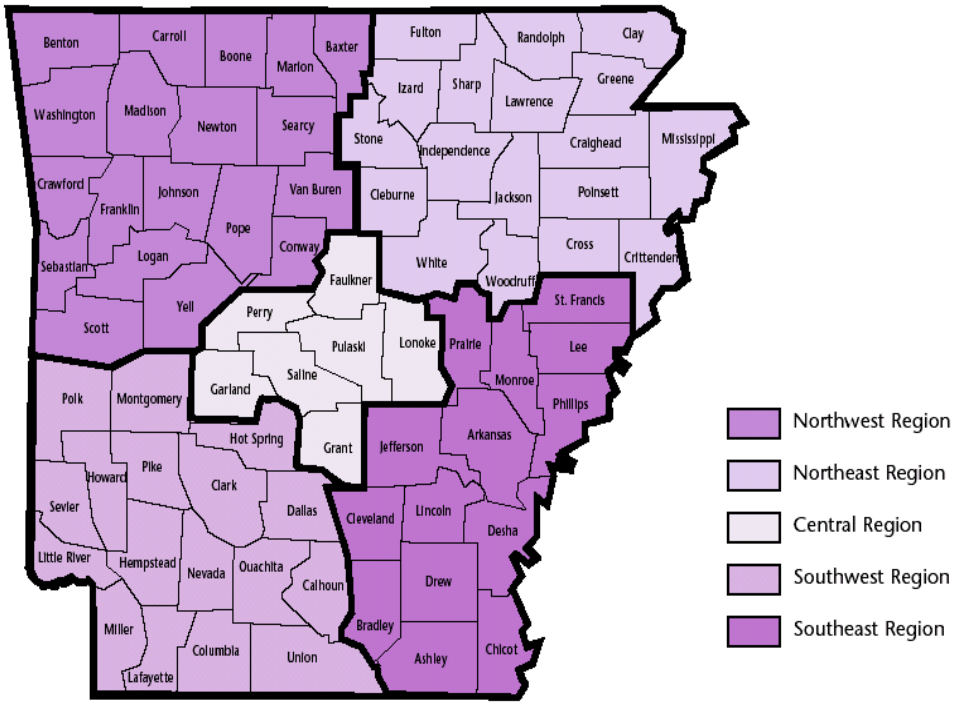
County Business Patterns is an annual series that provides subnational economic data by industry. The series is useful for studying the economic activity of small areas; analyzing economic changes over time; and as a benchmark for statistical series, surveys, and databases between economic censuses. County Business Patterns covers most of the country's economic activity. The series excludes data on self-employed individuals, employees of private households, railroad employees, agricultural production employees, and most government employees.

Current Population Survey

The Current Population Survey (CPS) is a monthly survey of about 50,000 households conducted by the Bureau of the Census for the Bureau of Labor Statistics. The CPS is the primary source of information on the labor force characteristics of the U.S.

population. Estimates obtained from the CPS include employment, unemployment, earnings, hours of work, and other indicators. They are available by a variety of demographic characteristics including age, sex, race, marital status, and educational attainment. They are also available by occupation, industry, and class of worker. Supplemental questions to produce estimates on a variety of topics including school enrollment, income, previous work experience, health, employee benefits, and work schedules are also often added to the regular CPS questionnaire.

APPENDIX C: ARKANSAS PUBLIC HEALTH REGIONS



Northwest Public Health Region	Northeast Public Health Region	Central Public Health Region	Southwest Public Health Region	Southeast Public Health Region
27 West Township	#40 Allen Chapel Road P.O. Box 4267	5800 West 10th St., Ste. 907	503 Walnut Street	1501 Dawson Rd.
Fayetteville, AR 72703	Batesville, AR 72503	Little Rock, AR 72204	Texarkana, TX 71854	Forrest City, AR 72236
Phone: 479-444-7700	Phone: 870-251-2848 or 251-2853	Phone:501-280-4950	Phone: 870-773-2108	Phone: 870-633-6812
Fax: 479-444-7189	Fax: 870-251-3449	Fax: 501-280-4999		Fax: 870-633-0158
Contact: Don Murray	Contact: Alma DeSio	Contact: Robin Thomas	Contact: Randy Lee	Contact: Jean Hagerman

APPENDIX D: GLOSSARY OF SELECTED TERMS

Age-Adjusted Mortality	Age-adjusted mortality is an indicator of death rates across the population, adjusted so that comparisons can be made across areas with different population numbers. It is usually measured per 100,000 population and is used as an indicator of health care need across the population.
Central City	The largest city of a Metropolitan area (MA). Central cities are a basis for establishment of an MA. Additional cities that meet specific criteria also are identified as central cities. In a number of instances, only part of a city qualifies as central, because another part of the city extends beyond the MA boundary.
Federal Poverty Level	Following the Office of Management and Budget's (OMB's) Directive 14, the Census Bureau uses a set of money income thresholds that vary by family size and composition to detect who is poor. If the total income for a family or unrelated individual falls below the relevant poverty threshold, then the family or unrelated individual is classified as being "below the poverty level." In 2003 it was $18,400 for a family of 4.
Health Profession Shortage Area	A federal designation for which the basic criteria is that 3500 or more people are served by a single primary care physician (or 3000 to one primary care physician if there are high needs of infant mortality, poverty, birth rates or indications of insufficient capacity)
Healthcare workforce	Healthcare professionals and others working in health care facilities including health professionals (e.g. physicians, nurses), paraprofessionals (e.g., nurse aides, home health aides, and technicians), and non-patient care workers employed in health service settings (e.g., food service workers, administrative staff)
Household	A household includes all the people who occupy a housing unit as their usual place of residence.
Income	The sum of the amounts reported separately for wages, salary, commissions, bonuses, or tips; self-employment income from own non-farm or farm businesses, including proprietorships and partnerships; interest, dividends, net rental income, royalty income, or income from estates and trusts; Social Security or Railroad Retirement income; Supplemental Security Income (SSI); any public assistance or welfare payments from the state or local welfare office; retirement, survivor, or disability pensions; and any other sources of income received regularly such as Veterans' (VA) payments, unemployment compensation, child support, or alimony.

Median Income	The median income divides the income distribution into two equal groups, one having incomes above the median, and other having incomes below the median
Medicaid	Medicaid is a program that helps pay for medically necessary medical services for needy and low-income persons. It uses state and federal government money.
Medically Underserved Area	A federal designation based on four Index of Medical Underservice (IMU) variables including: primary care physicians to population ratio, infant mortality rate percentage of population below poverty level, and percent of the population age 65 and over.
Medicare	A federal health insurance program designed to provide health care for the elderly and the disabled. People who qualify for Social Security benefits are automatically eligible for Medicare.
Metropolitan Statistical Area	A geographic entity defined by the federal Office of Management and Budget for use by federal statistical agencies, based on the concept of a core area with a large population nucleus, plus adjacent communities having a high degree of economic and social integration with that core.

APPENDIX E: FOCUS GROUP QUESTIONS

1. What is health?
   a. What is mental health?
   b. What is oral health
2. How do you stay healthy?
   a. Is it easy or difficult to stay healthy?
3. Where/from whom do you get the information you need to stay healthy?
4. How is your health?
5. Do you have health concerns?
   a. What are your health concerns?
   b. Are there other health concerns you have heard about in your community?
6. What do you think causes your health concerns?
   a. What do you think causes the health concerns in your community?
   b. What do you think you can do about these causes?
7. What do you do if you or your loved one has health problem?
   a. Where do you go/take your loved one for a health problem?
8. What keeps/stops you from getting care when you think you need it?
   a. Do you have health insurance?
9. What was/Tell me about your last experience with the healthcare system?
   a. What were the circumstances?
   b. Where was it?
   c. How long has it been?
10. If in a similar situation would you go to/do the same place/thing?
11. How were you treated compared to other people in that place/situation?
12. In your neighborhood/community/town/other do you think that people who look like you are as healthy as people who don't look like you?
    a. Why do you think people who look like you are more or less healthy than people who don't look like you?
    b. What do you think you can do about this?
    c. Do you think there are other people who can do something about this?
13. Who is responsible for keeping you/your family/your neighborhood/community healthy?